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## ACKNOWLEDGMENT

The writer is indebted to the members of his committee, Dean T. W. II. Irion, Professor Herman Schlundt, Professor Ralph K. Watkins, and especially to the chairman, Professor John Rufi, for guidance and counsel during the progress of this study. He is also indebted to other members of the faculty of the University of Missouri, particularly to Professor A. G. Capps and Professor Bower Aly; to the members of the Missouri State Department of Education; and to the superintendents, principals, and teachers in charge of the schools studied. To all of these he wishes to extend his sincere thanks.

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# EDUCATIONAL OPPORTUNITIES IN MISSOURI HIGH SCHOOLS

## CHAPTER I

### INTRODUCTION

#### Background of the Problem

In recent years there has been considerable agitation for a larger degree of educational opportunity. A number of states have enacted legislation designed to equalize the opportunities offered by the public schools. Examples of such states are Alabama,<sup>1</sup> Arkansas,<sup>2</sup> Indiana,<sup>3</sup> Montana,<sup>4</sup> North Carolina,<sup>5</sup> Oklahoma,<sup>6</sup> Texas,<sup>7</sup> Washington,<sup>8</sup> and West Virginia.<sup>9</sup> If one may judge by the following legal enactments, the people of the State of Missouri favor the policy of equalizing educational opportunities.<sup>10</sup>

“Sec. 13. *Length of term, levy, equalization quota, apportionment of state money.*—The board of directors of each and every school district in this state is hereby empowered and required to maintain the public school or schools of such district for a period of at least eight months in each school year. In order that each and every district may have the funds necessary to enable the board of directors to maintain the school or schools thereof for such minimum term and to comply with the other requirements of this

<sup>1</sup> Alabama State Board of Education, *Summary of Regulations Pertaining to the Minimum School Program for 1935-36*, Mimeographed Bulletin, 1935. pp. 1-12.

<sup>2</sup> Arkansas State Board of Education, *The School Law of Arkansas*, 1931. pp. 70-73.

<sup>3</sup> State of Indiana, *State School Relief in Indiana*, 1932. pp. 8-13.

<sup>4</sup> Montana State Superintendent of Public Instruction, *Supplement to School Laws of the State of Montana of 1931*, 1935. pp. 7-9.

<sup>5</sup> North Carolina State Superintendent of Public Instruction, *School Legislation Enacted by the General Assembly Session 1935 and Certain Laws of 1931 and 1933*. pp. 5-17.

<sup>6</sup> Oklahoma State Superintendent of Public Instruction, *School Laws of Oklahoma*, 1935. pp. 132-135.

<sup>7</sup> Texas State Department of Education, *Public School Laws of the State of Texas*, Bulletin No. 345, 1935. pp. 161-170.

<sup>8</sup> Washington State Department of Education, *Senate Bill No. 80 (The New Barefoot Schoolboy Law) State of Washington, Twenty-Third Regular Session*, Mimeographed Bulletin, 1933. pp. 1-5.

<sup>9</sup> West Virginia State Department of Education, *The School Laws of West Virginia*, 1935. pp. 69-71.

<sup>10</sup> Missouri State Department of Education, *State of Missouri Revised School Laws*, 1933. pp. 126, 130.

act, it is hereby provided that when any district has legally levied for school purposes (teachers' wages and incidental expenses) a tax of not less than twenty cents on each \$100 of the assessed valuation of property therein, such district shall be allotted out of the public school fund of the state an equalization quota to be determined by adding \$750 for each elementary teaching unit to which the district is entitled according to the provisions of section 14 of this act, \$1,000 for each high school teaching unit to which the district is entitled according to the provisions of section 14 of this act, and the amount approved for tuition and transportation according to the provisions of section 16 of this act, and then subtracting from the total, which total shall be known as the minimum guarantee of such district, the sum of the following items: The computed yield of a tax of twenty cents of each \$100 on the assessed valuation of the property of the district, the sum received the preceding year from the county and township school funds, and the sum estimated to be received for the current year from the railroad, telegraph, utility and all other taxes based on assessments distributed by the state board of equalization, plus the county foreign insurance fund for the school year 1932-1933 only."

"Sec. 16. *Tuition, districts to pay for high school students.*—The board of directors of each and every school district in this state that does not maintain an approved high school offering work through the twelfth grade shall pay the tuition of each and every pupil resident therein who has completed the work of the highest grade offered in the school or schools of said district and attends an approved high school in another district of the same or an adjoining county where work of one or more higher grades is offered; but the rate of tuition paid shall not exceed the per-pupil cost of maintaining the school attended, less a deduction at the rate of fifty dollars (\$50) for the entire term, which deduction shall be added to the equalization quota of the district maintaining the school attended, as calculated for the ensuing year, if said district is entitled to an equalization quota; if the district maintaining the school attended is not entitled to an equalization quota, then such deduction shall be added to the teacher quota of said district, as calculated for the ensuing year."

Numerous factors, of course, may contribute toward inequalities in educational opportunities. It is argued by some writers that the size of the high school has a direct bearing on its



efficiency. In recent years the problems of the small high school have received some attention.

In an extensive study of rural high schools in New York, Ferriss<sup>11</sup> found that laboratory and library facilities were very poor, that teachers were unprepared and inexperienced, and that little was done in the way of health education, or educational and vocational guidance.

In a later study including rural high schools in 47 states the same writer<sup>12</sup> found small enrollments, small classes, few teachers teaching in the field of their original preparation, and all teaching with very little supervision.

In a very intensive study of small high schools in Pennsylvania, Ruff<sup>13</sup> found little community leadership, high instructional costs, poor physical facilities for instruction, little professional study by the staff, practically no supervision, heavy teaching schedules, unfavorable study conditions, limited curricula, formal instruction, poor achievement of pupils, and little opportunity for participation in extra-curricular activities.

Clifton<sup>14</sup> in a study of 100 small high schools in Ohio found that less than half of the teachers had college majors in the fields in which they were teaching and that instructional costs increased as the size of the school decreased.

In the National Survey of Secondary Education<sup>15</sup> 505 unselected small high schools ranging in size from fewer than 20 to more than 300 in enrollment were compared with 100 selected high schools. Size, it was discovered, was more important than selectiveness in determining the efficiency of these schools.

While these and other studies have shown certain shortcomings in small high schools, there is still considerable question as to the relative efficiency of schools of various sizes. Some of these writers have expressed the opinion that the small high school is unnecessary, inefficient, expensive, and that it should be

<sup>11</sup> Ferriss, E. N., *The Rural High School, Rural School Survey of New York State*. pp. 31, 43, 61, 77, 105, 145.

<sup>12</sup> Ferriss, E. N., *The Rural High School, Its Organization and Curriculum*. U. S. Bureau of Education Bulletin, 1925, No. 10. pp. 1-2, 6, 14, 18.

<sup>13</sup> Ruff, John, *The Small High School*. pp. 37-40.

<sup>14</sup> Clifton, J. L., *The Small High School in Ohio*. pp. 114-118.

<sup>15</sup> Ferriss, E. N., Gaumnitz, W. H., and Brammell, P. R., "The Smaller Secondary Schools." U. S. Office of Education Bulletin, 1932, No. 17, *National Survey of Secondary Education*, Monograph No. 6. p. 235.

abolished. Others<sup>16</sup> have maintained that a small high school may be organized so that its work will compare favorably with that of larger schools. Our need for more information concerning the relative efficiency of high schools of various sizes is indicated in the following statement by Koos:<sup>17</sup>

“We are practically without information on this whole question of the desirable size of the school unit. At the same time, popularization of secondary education goes on, and the trend of size in urban schools is unquestionably upward. The problem appears to have enough tangible elements to justify an early investigation of some magnitude.”

### The Problem and Its Significance

**The Problem** The purpose of this investigation is to secure information concerning the status of educational opportunities in high schools of various sizes and to point out such inequalities as may be found. The question raised is this: How do the opportunities for securing a secondary education in small high schools compare with those in larger ones?

There is considerable support for the belief<sup>18</sup> that in order to provide adequate opportunities for securing a high school education the school should be located in a wholesome and stimulating environment, that it should provide attractive and sanitary grounds and buildings with adequate laboratory and library facilities, a competent teaching staff efficiently supervised, and a wide curricular and extra-curricular offering administered so as to meet the needs of each individual. These advantages should be provided at a minimum cost, both to the pupil attending and to the supporting community and state. Our problem then is: How do the opportunities for securing a secondary education in small high schools and in larger ones compare in regard to environmental facilities for instruction? physical school plants? administrative, supervisory, and instructional staffs? curricular and extra-curricular offerings? costs?

While there are other factors affecting the degree of educational opportunity in high schools, they will not be considered

<sup>16</sup> Broady, K. O., “In Defense of the Small High School.” *School Executives Magazine*, Vol. 53, pp. 121-122. December, 1933.

<sup>17</sup> Koos, L. V., “Looking Forward in American Secondary Education.” Editorial in *School Review*, Vol. 43, p. 84. February, 1935.

<sup>18</sup> White House Conference on Child Health and Protection, “The Children’s Charter.” *American Federationist*, Vol. 38, pp. 562-563. May, 1931.

in this study. Although their importance is admitted, no attempt will be made to evaluate such relatively intangible factors as professional attitude of teachers and principals, attitude of pupils toward their teachers and their school, quality of instruction, or content of courses within curricula. No attempt will be made to compare the achievement of pupils in schools of various sizes.

**Significance of The Problem** The significance of this problem is indicated by a study by Gaumnitz<sup>19</sup> of 14,143 schools distributed throughout the United States. All of these schools offered high school work in rural communities. Gaumnitz found that of 9,926 regular four-year high schools the median enrollment was 65.3, and that only 4.1 per cent enrolled more than 200. Of 1,256 regular three-year schools the median enrollment was 25.9 with only 7.5 per cent enrolling more than 50. Of the 1,272 regular two-year high schools the median enrollment was 15 with only 5.2 per cent enrolling more than 30. Of the 67 regular one-year high schools the median enrollment was 6 with only 4.5 per cent enrolling more than 30.

Table I, showing the size of public high school districts in Missouri in terms of average daily attendance, indicates the significance of the problem in this state. Since the data from which this table was made were certified to the State Department of Education and used in part as the basis for apportioning state aid to the districts, they are believed to be valid. Since only the very largest districts have more than one high school, we may assume that in all but a very few cases these figures represent the size of the high schools in the State of Missouri for the school year 1933-1934. It will be noted that of the 877 high school districts in the State of Missouri during the year 1933-1934 25 per cent had an average daily attendance of fewer than 34 resident and non-resident white children in grades 9-12 inclusive; 50 per cent had fewer than 58; 75 per cent had fewer than 106; 91.1 per cent had an average daily attendance of 200 or fewer. It will be noted further that only 4.4 per cent of the high school districts in Missouri had an average daily attendance in grades 9-12 of more than 300 pupils; only one per cent had 800 or more.

<sup>19</sup> Gaumnitz, W. H., *The Smallness of America's Rural High Schools*. U. S. Office of Education Bulletin, 1930, No. 13. p. 13.

TABLE I

SIZE OF PUBLIC HIGH SCHOOL DISTRICTS IN MISSOURI IN TERMS OF RESIDENT AND NON-RESIDENT WHITE CHILDREN IN AVERAGE DAILY ATTENDANCE, GRADES 9-12 INCLUSIVE, FOR THE SCHOOL YEAR 1933-34.<sup>20</sup>

Average Daily Attendance	Number of Districts	Percentage of Districts
1- 25.....	158	18.0
26- 50.....	204	23.3
51- 100.....	278	31.7
101- 150.....	100	11.4
151- 200.....	59	6.7
201- 250.....	17	1.9
251- 300.....	20	2.3
301- 350.....	8	.9
351- 400.....	6	.6
401- 450.....	3	.3
451- 500.....	3	.3
501- 550.....	0	.0
551- 600.....	3	.3
601- 700.....	5	.6
701- 800.....	3	.3
801-1000.....	2	.2
1001 or More.....	8	.9
Totals.....	877	99.7
Lower Quartile 33.5	Median 57.9	Upper Quartile 105.4

In view of these facts there would seem to be urgent need for a careful investigation of the actual conditions in these schools.

### Method of Conducting the Study

Before the study was begun, arrangements were made with the Missouri State Department of Education and with the North Central Association of Colleges and Secondary Schools to utilize fully any records which might be on file concerning the schools to be studied. Then 18 Missouri high schools were selected from a list of schools whose principals or superintendents were known personally to the writer or to members of the faculty of the School of Education of the University of Missouri. These principals and superintendents were all recommended as average or better students in graduate courses in high school administration and supervision or as competent administrators.

The 18 schools ranged in enrollment from 30 to 2,812 and were selected so as to fall into the six size-groups indicated in

<sup>20</sup> Data from the *Eighty-Fifth Missouri Report of Public Schools*, p. 145. Missouri State Department of Education, 1935.

Table II. At the same time an effort was made to secure as wide a geographic distribution as possible within each group. Seventeen of the 18 schools chosen for this study were officially rated by the State Department of Education as first-class high schools.

No claim is made that a sampling of 18 schools will accurately represent a cross section of Missouri high schools. Instead, it is believed quite probable that the small schools selected in the manner just described should be distinctly superior to the aver-

TABLE II  
NUMBER OF PUPILS ENROLLED AND NUMBER OF TEACHERS IN SELECTED  
HIGH SCHOOLS

School	Enrollment	Number of Teachers
<b>Group I (1-50)</b>		
School 30.....	30	3
School 39.....	39	2
School 42.....	42	3
<b>Group II (50-100)</b>		
School 81.....	81	4
School 97.....	97	4
School 98.....	98	4
<b>Group III (150-200)</b>		
School 167.....	167	7
School 188.....	188	10
School 192.....	192	9
<b>Group IV (300-500)</b>		
School 356.....	356	10
School 448.....	448	14
School 468.....	468	23
<b>Group V (600-1000)</b>		
School 610.....	610	23
School 665.....	665	17
School 993.....	993	35
<b>Group VI (1500-3000)</b>		
School 1916.....	1916	57
School 2078.....	2078	63
School 2812.....	2812	101

age schools of the same size. Since larger schools ordinarily are believed to employ more highly trained administrators than do smaller ones, this method of selection is believed to favor the small schools. That is, it seems likely that the larger schools are more nearly representative of the average schools of their size than are the smaller ones, which are probably considerably better than average for schools with the same enrollment.

In order to insure that the data be reliable and complete, it was decided to study only schools whose principals or superintendents would agree at the outset to give complete cooperation throughout the investigation. Every principal and superintendent approached agreed willingly and gave whole-hearted cooperation doing the entire course of the study.

Certain preliminary information was secured by correspondence with the principals and the superintendents. After careful study of this preliminary information, personal visits were made to each of the schools, thus providing an opportunity to verify the information already obtained and to secure further information which could not be gained by letter. Other data concerning member schools were gathered from records of the North Central Association of Colleges and Secondary Schools. In order that such data be uniform, non-member schools were also requested to fill out the same forms. The records of each member and non-member school were taken by the writer and supplemented and verified as far as possible on the grounds. In the same manner certain information concerning each school was obtained from the files of the State Department of Education and likewise verified by personal visitation. The visits to these schools were made by the writer during the second semester of the school year, 1934-1935.

Although the writer originally intended to secure detailed information concerning the cost of instruction in these schools, he was unable to do so because of the inadequacy of financial records kept by a number of the schools. For purposes of this study, therefore, the instructional costs were computed in terms of pupil enrollment and were determined on the basis of the salaries paid to teachers and principals, including also the percentage of superintendents' salaries allocated to teaching.

In securing the data objective devices were used wherever possible. The buildings were scored by means of a checking list based on the standards for high school buildings as recommended by the State Department of Education.<sup>21</sup> A checking list of environmental facilities was prepared. Another one was made for use in recording the information concerning laboratory facilities. Books in each library were checked against the titles in a prepared book list of 241 titles. This list was obtained by including every fifth title from the list of books recommended for first purchase in the *Standard Catalog for High School Libraries*.<sup>22</sup> Uniform blanks were used in recording information concerning the health and guidance programs of the schools. When visiting each school, the writer followed a systematic prearranged schedule in order that the procedure be kept uniform.

#### Method of Reporting the Study

In reporting this study the writer has deliberately chosen to depart from the statistical type of report, which is generally used in treating investigations of this nature. He has instead utilized a descriptive method. However, it should be clearly understood that the facts herein stated are derived from detailed factual studies and that the conclusions reached are based on statistical material of an objective and quantitative character.

As has already been indicated, objective devices have been utilized wherever possible. Official standards, checking lists, scales, and similar scoring devices were used to obtain the data needed. Samples of these devices are included in the appendices, along with the tables of objective data which comprise the chief basis for the descriptive report.

In order that the description of each school be clear and that the continuity be retained, it has seemed best to account for each school separately rather than to make an item by item comparison of all schools simultaneously. For obvious reasons the identity of the schools is not revealed, although the name

<sup>21</sup> *Schoolhouse Planning and Construction*. Missouri State Department of Education, School Building Series, Bulletin No. 2, 1933.

<sup>22</sup> *Standard Catalog for High School Libraries, Second Edition Revised and Enlarged*, 1932, and *Second Supplement (Cumulative) to Standard Catalog for High School Libraries, Second Edition Revised*, 1934.

and location of each school as well as the names of the superintendent and principal of each are on file at the University of Missouri.

So that the reader will keep clearly in mind the enrollment of the various schools, each school will be designated hereafter by a number which is identical to the enrollment for the current year. For example, School 30 has an enrollment of 30, School 39, an enrollment of 39, etc.



## CHAPTER II

### GENERAL INFORMATION CONCERNING THE SELECTED HIGH SCHOOLS

In order to give the reader a better perspective of the high schools included in this study, certain general information will be given before a discussion of individual schools is begun.

Each of the high schools is legally controlled by a Board of Education, the members of which are elected by the people of the school district. There are no educational or professional qualifications required of these board members.

The Board of Education ordinarily delegates at least a part of the responsibility of operating the school system to a professional administrator usually called the superintendent of schools. This official is responsible for the organization and administration of the entire school system, which may include elementary schools, junior high schools, senior high schools, four-year high schools, and in some cases junior colleges, or even four-year colleges. In the smaller school systems the superintendent teaches classes in the high school and exercises direct supervision over the high school, whereas in the larger systems another officer, called the principal, is in direct charge of each high school and is responsible to the superintendent for the administration and supervision of that particular school. Since this investigation is limited to high schools, reference is made to the superintendent only when that officer exercises direct supervision over the high school and maintains his office in the high school building. In the smaller high schools one of the teachers is usually designated as principal, although in these schools that title carries no additional duties or remuneration, since the superintendent does the work ordinarily done by the principal of a larger school. In this report, therefore, the individual referred to as principal may be in some cases a full-time teacher.

Most of the teachers in these schools have college degrees and have teaching certificates issued or approved by the State Department of Education. Most of these teachers have done some college work in the fields in which they are teaching and have taken some professional courses in education.

Pupils in these high schools are all white children, since in Missouri separate schools are provided for colored children. Most of the pupils reside in the district maintaining the high school they attend, although in the smaller schools from 30 per cent to 50 per cent of the pupils may live outside the district.

In most of the school systems of which these 18 high schools form a part pupils are classified into grades ordinarily corresponding to the number of years those pupils have attended school. The first eight years of a child's educational career he ordinarily spends in an elementary school. In most instances the high school offers instruction in the ninth, tenth, eleventh, and twelfth years or grades. A junior high school ordinarily enrolls pupils in the seventh, eighth, and ninth years, or grades, while the senior high school usually includes the tenth, eleventh, and twelfth grades. In some cases a school may be organized into a junior-senior high school enrolling pupils in grades seven through twelve.

Although the length of the annual school term varies from 32 to 40 weeks a year, in the majority of these schools the term lasts 36 weeks. The school day ordinarily begins between eight and nine o'clock in the morning and ends between three and four o'clock in the afternoon, approximately one hour in the middle of the day being allowed for a lunch period. A bell system divides the school day into from six to eight periods of 40 to 60 minutes each with from two to five minutes intermission between periods. Pupils meet for instruction in groups or classes of 20 to 30 pupils each. Most classes meet for one period each day, although in some schools science laboratory classes and vocational classes meet for double periods, at least on certain days each week.

Most of the schools require each pupil to take the following courses: English, three years; mathematics, one year; social studies, three years; and science, one year. Such other courses

as are offered in larger schools are usually optional to pupils. Since some of the smaller schools offer no elective courses, all pupils in each of these schools follow exactly the same program. The majority of the schools offer courses in physical education—chiefly athletic games. Since such courses ordinarily are taken either without credit toward graduation or with reduced credit, in this report they are not included in the discussion of the regular courses offered by each school. Most of the pupils are enrolled in four courses each year, although in some instances pupils are allowed to take one additional course.

One large room in each school is ordinarily set aside as a study hall where pupils are expected to remain when not in class. In the majority of schools pupils are supposed to prepare most of their lessons in the study hall, which is supervised each period by a teacher who happens not to have a class at that particular time.

“Marks,” or qualitative estimates of the pupils’ work, are issued at intervals throughout the school year. Credits earned by pupils are evaluated in terms of units, one unit ordinarily representing a year’s work in any subject in which a class meets daily for a period of 40 minutes or more and in which outside study is expected. In most of these schools 16 units, earned in grades nine to twelve inclusive, are required for graduation.

In addition to courses for which credit toward graduation is given in most of these schools certain other activities are available pupils. These “extra-curricular” activities are usually optional with pupils and may include music, dramatics, debating, athletics, or clubs connected with the regular class work. Each of such activities is ordinarily supervised by one or more of the high school teachers.

The schools included in this study with the exception of the two largest ones are under the supervision of the State Department of Education. This department consists of a State Superintendent of Schools, elected every four years by popular vote, and a number of assistants. Ordinarily a representative of this department inspects each school once a year and makes to the Board of Education of that school district a report concerning his official visit.

## CHAPTER III

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FEWER THAN 50 PUPILS

#### School 30

School 30 is in a town of about 200 people in a strictly agricultural community. The only organizations of this community are three churches and a chapter of the Masonic Lodge. This town contains no public libraries, museums, parks, theatres, hospitals, factories, or newspapers.

The school building houses the pupils in the eight elementary grades as well as those in the four high school grades. This building, constructed in 1910 at a cost of \$9,000, has had since that time no important additions. The grounds, somewhat less than one-half acre in area, contain a basketball court which can be used in dry weather. The building scored 53 points out of a possible 284 on the checking list of building specifications.

When compared with these specifications the classrooms have small windows, low ceilings, poor ventilation, and poor lighting. In most of the rooms artificial illumination is made possible by a single electric light socket suspended from the ceiling, although at the time the writer visited the school there was a light bulb in only one room. Some of the rooms have no electrical wiring or other means of providing artificial lighting. None of them contains a bulletin board or a bookcase.

One of the classrooms is designated as the science laboratory. To reach this room it is necessary either to go down through the furnace room or to go outside the building to another door connecting with the basement. Steam radiators in the laboratory are along the ceiling. The four windows, which are about 18 inches square, are near the ceiling along one side. A home-made table has been supplied in this room for use of the science classes in conducting experiments. This table contains four sinks, made of flexible sheet iron. These sinks connect with a

pipe which opens about four inches above the concrete floor in the center of the room. Gas is furnished in the laboratory. The only provision for its use is a two-burner gas plate of the type ordinarily found in a kitchen. The laboratory contains certain apparatus used in experimental work in science classes. This apparatus consists of the following: a plane, two ring-stands, several empty bottles, a broken air pump, twelve lamp chimneys, twenty-four test tubes, and a Harvard balance. In addition there are a few chemicals, which seem to be deteriorated, and a pile of rocks. The laboratory is also used as a storeroom for broken chairs and other discarded furniture. Dust and cobwebs are noticeable here.

However, this science equipment is not in present use, since laboratory work in agriculture and in biology has been discontinued and the general science classes use this room only during alternate years. In the superintendent's office is a projection lantern and perhaps a hundred microscope slides, some of which were donated by an elderly physician, who had no use for them, and the rest prepared by a former student of the school while he was taking a biology course at college. A limited amount of demonstration work in biology is done with these slides. For additional demonstration work the school had purchased one frog which had been dissected and preserved by the instructor and was expected to last several years.

There is no gymnasium. Although pupils enroll in physical education classes, these classes do not meet in winter or in rainy weather. However, in the main floor corridor of the building, taking up most of the space, is a ping-pong table, made by placing boards on sawhorses, which affords indoor recreation for the pupils.

There is no auditorium. In fact the superintendent was in a dilemma concerning a place for the senior play this year, since the old run-down community hall formerly used had become so dilapidated that the authorities were expecting to tear it down.

The library has been formed by building a partition about four feet high across one end of the second floor corridor. The books are not catalogued. Although the library contains about

700 volumes, only the following three titles from the selected checking list were found:

Cheyney, E. P., *Short History of England*  
Gayley, C. M., *Classic Myths in English Literature and  
in Art*  
Pieper, C. J., and Beauchamp, W. L., *Everyday Problems  
in Science*

Two issues of *Scholastic* comprised the magazine list of the school.

At the end of the corridor opposite the library is an enclosure about six feet by ten feet which the superintendent uses as an office.

Outdoor toilets are provided for this school.

The superintendent teaches classes in American history, geography, and agriculture and supervises the study hall for two 40-minute periods each day. He and one of the other teachers have received the degree of Master of Arts. All members of the faculty have taken at least 15 semester hours of college work in professional education courses. The superintendent and the teacher designated as principal have been teaching 12 years each. The superintendent receives a salary of \$1,225 a year; the principal and the other teacher are paid \$765 each.

Although only eleven units of high school work are offered this year, five additional units are offered in alternate years, so that it is possible for a pupil to earn sixteen units. All boys and girls take exactly the same courses: algebra, plane geometry, advanced mathematics, English, geography, world history, American history, citizenship, American problems, general science, biology, typewriting, and agriculture. The only change in the curricular offering during the past five years was the substitution of a biology course for a course in physiology.

In addition to these courses in which high school credit toward graduation is given, there is a dramatics club sponsored by the English teacher, and music one day a week, directed by a musician from outside the school. The annual commencement exercises consist chiefly of an address by a local citizen and musical selections by the pupils.

Once a year the county physician and once a year a local physician give physical examinations to the pupils, who are advised of needed treatment. The superintendent knows of only one case in which a pupil has actually received the recommended medical attention.

According to the superintendent's statement, about the only guidance given to pupils is an "attempt to keep out of college those who don't belong there." Records kept by the school concerning each pupil show the scholastic marks, the credits earned, certain diseases the pupil has had, and the extra-curricular activities in which the pupil has engaged.

According to the superintendent, the purpose of this high school is "moral building."

In this school each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for any class work or other required activity. According to the superintendent's estimate, the average pupil spends about \$2.50 a year for participation in voluntary extra-curricular activities. In addition each member of the graduating class is expected to purchase a class ring for \$7.00, engraved invitations to the commencement exercises for approximately \$2.75, and also a complete outfit of new clothing for the occasion. The instructional cost per pupil enrolled is \$96.63 for the current school year.

Below is an excerpt from a letter from the State Department of Education to the secretary of the Board of Education, following this year's annual visit to the school by a representative of that department:

"Your school is progressing nicely, and the course of study is well organized. For the further improvement of your school we recommend that:

- "1. provide maps for use in teaching history.
- "2. to spend at least \$150 in improving the library which is in poor condition at this time.
- "3. improve the laboratory equipment."

No other recommendations pertaining to the school were made.

**School 39**

School 39 is in a town of about 340 people, a community in which farming is the only important industry. The town has three churches and a weekly newspaper.

The grounds on which the school building is located consist of approximately one acre which has neither grass nor other landscaping. There is an outdoor basketball court, a flagpole, and a pump. The school building was constructed in 1910 at a cost of \$10,000 and since that time has had no important additions. Out of a possible 284 points the building scored 63. The two rooms on the ground floor house the first six elementary grades. The seventh and eighth grades use one of the second floor rooms; the ninth and tenth grades, the remaining room. There are no grades beyond the tenth.

Artificial illumination is provided in each classroom by means of two electric lights suspended from the ceiling. Desks are old and deeply carved. In a number of instances the seats behind the desks have been replaced by arm chairs which are placed upon blocks nailed to the floor. On one side of the classroom used by the ninth and tenth grades is a table about ten feet long, under which are piled some pans and flower pots. Above the table and nailed to the wall are two home-made wooden cabinets. One of these contains the encyclopedia and a few reference books used in the agriculture class. The other contains the science equipment, which consists of some small bottles, a balance, a milk tester, and a few chemicals.

There is no auditorium and no gymnasium. There are no dressing rooms or showers; there is no provision for washing the hands and face. Drinking water is provided by a cistern in the yard. There are no drinking fountains or water jars. Recently a hand pump had been installed to supply the boiler in the basement with cistern water.

In one end of the second floor corridor is the library, formed by building a partition across the corridor. An opening about 18 inches square in the library door enables the pupil-librarian to issue such of the books as may be necessary. The library contains 378 volumes, the following 27 titles of which are to be found on the selected checking list:



- Austen, Jane, *Pride and Prejudice*  
Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
Beard, C. A., and Bagley, W. C., *Our Old World Background*  
Blackmore, R. D., *Lorna Doone*  
Boy Scouts of America, *Official Handbook for Boys*  
Carpenter, H. A., and Wood, G. C., *Our Environment*  
Cheyney, E. P., *Short History of England*  
Church, A. J., *Odyssey for Boys and Girls*  
Cooper, J. F., *Deerslayer*  
Davis, W. S., *Day in Old Athens*  
Doyle, A. C., *Adventures of Sherlock Holmes*  
Eliot, George, *Mill on the Floss*  
Elson, H. W., *History of the United States of America*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Goldsmith, Oliver, *Vicar of Wakefield*  
Grenfel, W. T., *Adrift on an Ice-pan*  
Hart, A. B., *American History Told by Contemporaries*  
Hill, H. C., *Community and Vocational Civics*  
Kipling, Rudyard, *Captains Courageous*  
Lewis, H. R., *Productive Poultry Husbandry*  
Lytton, E. G., *Last Days of Pompeii*  
Parkman, Francis, *Boys' Parkman*  
Pieper, C. J., and Beauchamp, W. L., *Everyday Problems in Science*  
Riis, J. A., *Making of an American*  
Robinson, J. H., *Medieval and Modern Times*  
Ross, E. A., *Civic Sociology*  
Taussig, F. W., *Tariff History of the United States*

Most of the books are old and apparently little used. The pupil-librarian showed the writer one volume which, according to the record, had not been checked out since 1913. There is no catalog. The library has no magazines.

This building contains no office, no lockers or cloakrooms, and no indoor toilets.

The principal has the degree of Master of Arts from the University of Missouri. In addition to 65 semester hours in professional courses in education, he has received a total of 87 semester hours of credit in other subjects. The other teacher lacks about a year's work of having his bachelor's degree. He has completed about 12 semester hours in professional educa-

tion courses at Central Wesleyan College and at the Missouri School of Mines. The principal has had thirteen years of teaching experience; the other teacher has had eight. Each now teaches six classes daily. The principal has one class in each of the following subjects: seventh grade arithmetic, eighth grade arithmetic, ninth grade algebra, plane geometry, seventh and eighth grade geography, and general agriculture. In addition he is in charge of the study hall during two 40-minute periods. The other instructor teaches one class in citizenship, one in seventh and eighth grade history, one in seventh grade English, one in eighth grade English, one in ninth grade English, and one in tenth grade English. He also is in charge of the study hall for two 40-minute periods daily. The principal receives a salary of \$880 a year. The other teacher gets \$640.

Courses are offered for high school credit in elementary algebra, plane geometry, English, community civics, and agriculture. World history and general science are also offered in alternate years, making a total of eight units of high school work. No courses have been added to or dropped from the curriculum during the past five years.

During the two 15-minute recess periods provided in the daily schedule, some of the pupils occasionally play basketball, volleyball, or playground baseball. There are no other extra-curricular activities.

The county nurse conducts annual health examinations of all pupils. Although two physical defects were discovered this year, the principal does not know whether they were treated or not, since no health records are kept.

The only pupil-records kept by the school are preserved in a large bound ledger in the teacher's desk in one of the classrooms. These records show each pupil's scholastic marks, credits earned, attendance, deportment, and lists of books on which he has reported in English classes. Each year the names of the pupils in the new class are added at the end of the list of names of the previous year. The book is almost worn out and is nearly full. In a year or two when it is completely filled, the principal expects to recommend that the Board of Education purchase a file of some kind for pupil records.

Although little evidence of any guidance could be discovered, the principal said the purpose of his "guidance program" is to "guide the child into the work for which he is best fitted and most apt to be successful."

This school, containing grades seven through ten, is called a junior high school. The ninth and tenth grades together enroll 21 pupils.

The purpose of this high school, as stated by the principal, is "to offer such courses as are usually required in high schools so that pupils may complete their high school work elsewhere in two years."

Pupils furnish their own textbooks and other supplies. The instructional cost per pupil in this high school is \$38.97, when figured upon the basis of enrollment in the four grades, seventh through tenth.

In a letter written during the current year to the secretary of the Board of Education in this district, following the annual visit by a representative of the State Department of Education, after commending the school for employing "properly qualified teachers," "repairing the furnace," and "keeping the outdoor toilets in very satisfactory condition," the State Department makes this single recommendation for the improvement of the high school:

"We suggest that you change the doors at the entrance to your building so that they will open to the outside instead of to the inside."

### School 42

School 42 is in a town of about 500 people. It is located in a community where there are no important industries except farming. In the town are four churches, a picture show, a weekly newspaper characterized by the superintendent as "lousy," a Boy Scouts organization sponsored by the superintendent of schools, and a parent-teacher association.

The school building houses the eight elementary and the four high school grades. This building was constructed in 1912 at a cost of \$12,000 and since then has had no important additions.

The grounds on which the school building is located consist of approximately one acre. As a result of erosion numerous ditches have been formed in the outdoor basketball court and other parts of the playground. The grounds show no evidence of landscaping. The building scored 49 points out of a possible 284 on the checking list of building specifications.

Classrooms have small windows, low ceilings, and poor ventilation, according to these specifications. There are no bookcases or bulletin boards. Artificial illumination is secured by means of electric lights. The alternating current provided by the local power plant is of such low frequency as to make the lights visibly unsteady. In the room in which science classes are taught two electric lights are suspended from the ceiling. Since one of these was considered too bright, a metal baking pan has been attached to the light by means of a wire in order to reduce the glare in the classroom. Although a few worn-out pieces of science equipment are still in use, the science teacher said that no equipment had been bought for five or six years and that it keeps him rather busy trying to mend enough old pieces to provide for any experiments. In fact, according to his statement, he has furnished most of the equipment himself, with the exception of a large electrical device in one corner of the room. This piece of equipment, which measures about eight feet by six feet by three feet, was donated to the school by a physician who had purchased it for use in his practice but had decided it was of no service to him. It is not used in science classes. The science teacher feels that with limited equipment, no water, no gas, it is almost impossible to teach general science and physics properly.

There is no auditorium and no gymnasium. The one dressing room, which is in the basement, is reached by going through the furnace room. Although no bathing facilities are provided by the school, some of the boys have improvised a shower by placing a barrel on a platform outside the building. When the weather is not too cold, the boys hang a canvas around the platform, carry water from the well, and have their shower bath.

The library is an enclosure approximately four feet by twelve feet, located in the middle of the second floor corridor. Since

the only windows in this corridor are at each end, the library requires artificial lighting. A single light bulb, projecting horizontally from a socket on one of the shelves at a height of about four feet, furnishes the illumination. Of the 700 catalogued and indexed volumes in the library the following nine books were found whose titles appear on the selected list:

Austen, Jane, *Pride and Prejudice*  
Dickens, Charles, *David Copperfield*  
Eliot, George, *Mill on the Floss*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Goldsmith, Oliver, *Vicar of Wakefield*  
Lewis, H. R., *Productive Poultry Husbandry*  
Morgan, A. P., *Boys' Home Book of Science and Construction*  
Robinson, J. H., *Medieval and Modern Times*  
Washington, B. T., *Up from Slavery*

The following magazines come regularly to the school library:

*American Magazine*  
*Hygeia*  
*Literary Digest*  
*National Geographic Magazine*

The superintendent furnishes two daily newspapers.

The superintendent's office is a small classroom no longer needed for its original purpose. Important papers are kept there in a padlocked wooden box about ten inches square. In this school there are no plumbing fixtures; drinking water is obtained from a well in the yard; toilets are outside. There are no lockers in the building.

The superintendent, with the degree of Master of Arts from the University of Missouri, has had ten years of teaching experience. He is very anxious to secure a position in a larger system, one enrolling at least 150 pupils. After having been in this school five years, he feels that there is no chance for advancement here.

Just before Christmas one of the teachers resigned. The superintendent recommended the appointment of a certain candidate

and, believing the matter settled, went on his vacation. When he returned, he found that the wife of the vice-president of the Board of Education had been given the position. While the superintendent was not in favor of employing the woman, he could do nothing about it. Since the vice-president of the board is a prominent physician whose wife does not need the job, her appointment has stirred up in the community considerable opposition to her husband. A great many people also resent the fact that the president of the board has a daughter on the elementary school faculty. Consequently, the superintendent feels that while he has the support of the board, and also of the patrons, he is in a rather uncomfortable situation.

The superintendent receives an annual salary of \$1,215; the two other teachers get \$810 each. The superintendent teaches one class in plane geometry, one in advanced arithmetic, one in algebra, and one in American history. In addition he coaches the high school athletic teams and supervises the instruction in the eight grades of the elementary school.

Courses are also offered in English, geography, world history, general science, physics, and physiology. In alternate years citizenship, American problems, and agriculture are offered, making a total of 16 units. No courses have been added to or dropped from the curriculum during the past five years.

In addition to these courses for which high school credit is given, certain extra-curricular activities are included in the school program. Thirty-three pupils take part in glee club and chorus work, three in debating, and a few in plays, three of which are to be given this year. Athletics consist of inter-class track meets, basketball tournaments, and horseshoe meets. This year all the boys except one reported for basketball practice. According to his statement, the superintendent personally pays a large part of the expenses connected with athletics. The total receipts for the year's athletic events amounted to \$27.57. The chief feature of the commencement exercises for this year is to be an address by a local attorney.

Annual physical examinations are given to pupils by the local physicians. No records concerning health or physical characteristics of pupils are kept.

Little evidence of individual guidance of pupils could be discovered. No records were found in the office except a few lists of expenditures and receipts made out in pencil on unruled paper. According to the statement of the superintendent, his pupil-record system shows only the scholastic marks and credits earned by each pupil. He said that he makes two copies of these records, keeping one at home and the other in the bank, since the school has no vault. The superintendent said the purpose of his guidance program was "to give the pupil an opportunity to investigate the field in which he is most interested." He said the purpose of the high school was "to train people to know the rules of citizenship to fit into the community."

In School 42 each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for any class work or other required activity. According to the superintendent's estimate, the average pupil spends about \$1.50 a year for participation in extra-curricular activities. Each member of the graduating class, however, is expected to purchase a class ring for \$6.00 to \$7.00 and engraved invitations to the commencement exercises for approximately \$3.70. In addition he must pay a rental fee of \$1.50 for the use of a cap and gown to be worn during the commencement exercises. Instruction in this school costs \$67.50 per pupil enrolled this year.

From a letter from the State Department of Education written during the current year to the secretary of the Board of Education after the annual supervisory visit, the following quotation gives the only recommendations for improvement of this school:

"For the further improvement of your school we suggest that you redecorate where the plaster has been repaired that you add about \$100 worth of laboratory apparatus to your science equipment."

A notation concerning the library, on the report of the State High School Supervisor for the current year, reads:

"Needs some replacements—generally very good for this type of school."

### Summary

The towns in which the high schools enroll fewer than 50 range in population from approximately 200 to 500. Each is in a strictly agricultural community with few educational or recreational facilities other than those furnished by the school. Each school has limited playground space. Buildings are entirely inadequate, according to approved standards. While science courses are offered in all these schools, there are few laboratory facilities in any of them. None has an auditorium or gymnasium. Libraries in each school consist of a few old and poorly selected volumes placed in make-shift quarters. The administrative head of each of these schools has the degree of Master of Arts from the University of Missouri and has had from ten to thirteen years of school experience. With the exception of one teacher in School 39, each of the teachers has a bachelor's degree. Salaries range from \$640 to \$1,225. No elective courses are offered in any of these schools. School 39 offers eight units of high school work, whereas the other two offer sixteen units each. Pupils in these schools are afforded little opportunity for participation in extra-curricular activities. None of these schools has a health or a guidance program. Few records are kept in these schools. Pupils furnish all textbooks and other instructional supplies. There are no fees for class work or other required activities. The estimated expenditure by the pupil for participation in extra-curricular activities is \$1.50 to \$2.50 a year. In School 39 there are no commencement exercises. In the other schools the cost to the pupil of participating in the various exercises connected with graduation is from a total of \$10.00 to \$10.00 plus a complete new outfit of clothing. The annual cost of instruction per pupil enrolled ranges from \$38.97 to \$96.63. The State Department of Education regularly inspects these schools. The letters sent to these schools following this year's annual inspection contained few recommendations for improvement. School 39 offers but two years' work for high school credit and is rated as a third-class high school. Schools 30 and 42 are officially rated as first-class high schools by the State Department of Education.



## CHAPTER IV

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FROM 50 TO 100 PUPILS

#### School 81

School 81 is located in a town of approximately 900 people. In the last eight years this town has decreased in population from about 2,000 to its present size, probably as a result of the abandoning of a number of coal mines. With the exception of agriculture there are no important industries, although one small mine is still operating. The only community organizations are three small churches.

The school building houses the pupils in the eight elementary grades as well as those in the four high school grades. The main part of the building was constructed in 1913, although some additions were made in 1923. According to the school records, the cost of the building was \$33,500. The grounds, which cover approximately one-half acre, have no special provisions for any kind of organized play. The building meets the specifications in 63 out of 284 items considered.

Classrooms have no bulletin boards, lockers, storage cabinets, or bookcases. There is no equipment for doing experimental or demonstration work in science classes.

The gymnasium, which is sometimes also used as an auditorium, is located in the basement. It has a ceiling too low to meet standard specifications. The inside walls of the gymnasium are constructed of rough brick. Ventilation is afforded by windows near the top. Toilets are out-of-doors. Although one shower is provided for the boys and another for the girls, the water pressure is not strong enough to operate the two at once. The only other facilities for washing are a bowl in the corridor of the main floor, and a large rusty funnel fitted beneath a faucet in the basement near the gymnasium door.

In addition to a few ragged textbooks, the library contains 102 volumes, all of which are badly dilapidated. There is, however, one set of *The World Book Encyclopedia* in good condition. No books from the selected list are in the library. There are no magazines.

Adjacent to the library is the study hall, a long narrow room with most of its windows along one side. The large folding chairs provided for the pupils squeaked so loudly with every bodily movement that study conditions must have been adversely affected. Seats were arranged so that about half of the pupils were directly facing the light.

The office of the superintendent is a room approximately ten feet square. It contains a desk, a bookcase, and a duplicating device the superintendent has made.

The superintendent has the degree of Master of Arts from the University of Missouri. He has been in this position for five years and says he is very anxious to leave because of poor living conditions in the town and a very conservative school board that seldom takes any of his recommendations. He teaches three mathematics classes daily. He is responsible for supervising the instruction in the eight grades of the elementary school as well as in the four grades of the high school.

The principal has also attended the University of Missouri, although he has not yet received his bachelor's degree. He was dismissed from the university at one time for deficient scholarship, but later was allowed to return. He is filling out the unexpired term of the former principal, who resigned early in the school year to take a more remunerative position with a packing house. The principal teaches a class in world history, one in American history, one in American problems, and one in geography. In addition he has charge of the study hall during two 45-minute periods daily.

The science teacher is a man, possibly 75 years old, whose hearing appears defective and whose memory seems to be failing him. At least, according to the superintendent, he cannot remember just what colleges he has attended, when he attended them, or what courses he studied while there. In the office is an envelope containing numerous medical certificates, receipts for

fees, etc., showing that he attended, or at least enrolled in, a number of small schools and colleges approximately 30 to 50 years ago. There is also a transcript of credit which is so illegible that it was impossible to determine just what he had studied. The superintendent could offer no help, since he had been unable to obtain accurate information. The science teacher has classes in physics, physiology, general science, agriculture, and algebra. In addition he has charge of the study hall for one 45-minute period a day. He was reported to have had considerable disciplinary trouble. On numerous occasions, according to the superintendent, the science teacher has left town and missed the daily train back. If all appeared quiet in the science classes, the superintendent frequently did not discover the instructor's absence until a number of classes had met. The science teacher gives very high marks in comparison with those of the rest of the faculty. Inspection of a recent quarterly report showed 60 per cent "superior" and "excellent" marks, with only one "inferior" mark. (The boy who made this mark, the writer was told, had been caught smoking.) According to the superintendent, this teacher gives no examinations and keeps no record of the achievement of his pupils. Instead he estimates the scholastic mark for each pupil at the end of each nine-week period without reference to any records. He takes no suggestions from the superintendent, and is retained by the Board of Education against the will of the superintendent "because he needs the job."

The other teachers object to distributing their marks in accordance with suggestions made by the superintendent, and the board members feel that the "teacher knows more about it than anyone else."

The superintendent receives a salary of \$1,170 a year; the principal and the other teachers get \$765 each.

The 16 units offered in this school are algebra, plane geometry, arithmetic, English, citizenship, geography, world history, American history, American problems, general science, physics, physiology, and agriculture. No courses have been added to or dropped from the curriculum during the last five years.

The recitation period is 40 minutes in length. In order to

be accredited by the State Department of Education it is necessary in this school for laboratory courses to meet for double periods. Although double periods are provided in the schedule to meet the requirement, there are no experiments or demonstrations, and the pupils are dismissed for play during the extra period.

Extra-curricular activities are basketball and a dramatics club. The chief feature of the commencement program the previous year was an address by a local attorney.

There is no health program and no guidance program. The pupil-records, which are contained in a book about five inches by eight inches in size, show the scholastic marks and credits earned by each pupil.

According to the superintendent's statement, he considers the purpose of this high school to be "preparation for college," although, he says, the graduates who have attended college have made very poor records there, honor pupils from this high school seldom making more than average marks while attending the nearest junior college.

As the result of great economy the superintendent is able to report a small surplus for the year. While he would like to purchase library books and science equipment with the money, his suggestion has met with little favor from the Board of Education. The writer was told that the board, pleased to find that the school had all the money it needed, was planning to have some of the sidewalks lowered, since a friend of the president was an unemployed contractor.

In School 81 each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for any class work or other required activity. According to the superintendent's estimate, the average pupil spends about \$3.00 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class ring for \$5.25 to \$6.50 and invitations to the commencement exercises for approximately \$2.00. Each year the eleventh and twelfth grades have a banquet which costs each pupil \$1.00. The members of the graduating class must also provide for themselves caps and gowns to be worn during the commencement

exercises. The cost of instruction in this school per pupil enrolled is \$42.78 for the current year.

The letter to the secretary of the Board of Education from the State Department of Education, following this year's annual supervisory visit by a representative of that department, contains the following comment:

"You have a good group of teachers and a well organized high school program, according to the report of the supervisor."

No recommendations for improvement were made.

### School 97

School 97 is located in a town of about 1,100 people, predominantly of German descent. Agriculture is the only important industry. A parochial school system, consisting of an elementary school, an academy, and a junior college, is located here. The town furthermore has a moving picture theatre, a weekly newspaper, a community band, five churches, and a creamery. There is also a Girl Scouts organization, a women's Forum club, and a chapter of the Masonic Lodge.

The school building houses the pupils in the eight elementary grades as well as those in the four high school grades. This building, constructed in 1915 at a cost of \$20,000, has had no important additions since that time. The grounds, consisting of approximately one acre, have no special provisions for organized play. On the checking list of building specifications the building scored 96 points out of a possible 284.

Classrooms contain supply cabinets, bookcases, and bulletin boards. Artificial lighting is provided by one or two shaded electric lamps on the ceiling of each room. Science classes meet in two basement rooms which have concrete floors. Heat is supplied in these rooms by steam radiators near the ceiling. In one of the rooms are a number of tables and a sink with running water. Since there is no connection with a sewer, the waste from the sink is allowed to drain out on the school yard. Although courses in physics are not now offered in this school, several pieces of equipment formerly used in physics classes

are available. In addition, there are three alcohol lamps, a microscope, a milk-testing apparatus, and a few chemicals.

The building has no gymnasium. This year for the inter-scholastic basketball games the school rented a gymnasium from the junior college. In the school building one basement room containing a shower, which is used only during the basketball season, serves as a dressing room for the boys. The girls dress in the science laboratory.

There is no auditorium. The study hall, which seats about 75 pupils, has been fitted up with a stage. At the opposite end of the room is the library, which has, in addition to shelves for books, a librarian's desk and a magazine stand. The library contains about 1,300 catalogued books, of which the following 29 titles are on the selected list:

- Austen, Jane, *Pride and Prejudice*  
 Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
 Blackmore, R. D., *Lorna Doone*  
 Cheyney, E. P., *Short History of England*  
 Comstock, J. H., *Insect Life*  
 Cooper, J. F., *Deerslayer*  
 Davis, W. S., *Day in Old Athens*  
 Dickens, Charles, *David Copperfield*  
 Doyle, A. C., *Adventures of Sherlock Holmes*  
 Elson, H. W., *History of the United States of America*  
 Galpin, C. J., *Rural Life*  
 Gayley, C. M., *Classic Myths in English Literature and in Art*  
 Georgia, A. E., *Manual of Weeds*  
 Goldsmith, Oliver, *Vicar of Wakefield*  
 Gray, Greta, *House and Home*  
 Hawthorne, Hildegard, *Romantic Rebel, The Story of Nathaniel Hawthorne*  
 Hill, H. C., *Community and Vocational Civics*  
 Hough, Emerson, *Story of the Cowboy*  
 Johnsen, J. E., *Child Labor*  
 Kipling, Rudyard, *Captains Courageous*  
 Kitson, H. D., *How to Find the Right Vocation*  
 Lewis, H. R., *Productive Poultry Husbandry*  
 Lytton, E. G., *Last Days of Pompeii*  
 Packard, L. O., Sinnott, C. P., and Overton, Bruce, *Nations at Work*

Pieper, C. J., and Beauchamp, W. L., *Everyday Problems in Science*  
Pupin, M. I., *From Immigrant to Inventor*  
Riis, J. A., *Making of an American*  
Slosson, E. E., *Creative Chemistry*  
Taussig, F. W., *Tariff History of the United States*

The following magazines come regularly to the library:

*American Girl*  
*American Lutheran*  
*American Magazine*  
*Hygeia*  
*National Geographic Magazine*  
*Nature Magazine*  
*Pathfinder*  
*Popular Science Monthly*  
*Reader's Digest*  
*Reading and the School Library*  
*Scholastic*  
*School Arts Magazine*  
*Science Leaflet*  
*Scientific American*  
*Walther League Messenger*  
*Wilson Bulletin*

The following magazines were taken a year or two ago:

*Current Science*  
*Popular Mechanics Magazine*  
*Science News Letter*

Back copies of magazines are preserved. *The National Geographic Magazine* has been bound the last two years.

The superintendent's office, located on the second floor, is a room about ten feet square.

Boys' and girls' toilets are inside the building, adjacent to each other. The girls' toilet opens into the same corridor as do the two science rooms and is adjacent to one of the rooms. Neither toilet has doors. Both have openings only. The fixtures are made of wood. There are no plumbing connections. For purposes of ventilation during the winter months pipes have been connected from the toilets to the furnace.

During the summer sessions the superintendent has been attending the University of Missouri where he is working to-

ward the degree of Master of Arts. He has been in his present position for three years. He teaches general science, biology, and plane geometry and is responsible for supervising the instruction in the eight elementary grades and the four high school grades. According to his statement, he attempts to spend an hour or two a week directing laboratory work in his science classes. At other times the pupils conduct their experimental work in science without supervision by a teacher. The superintendent believes not only that he is totally unprepared to teach biology, but also that his equipment and time schedule are both inadequate. He feels, however, that he has an efficient and cooperative faculty, all of whom have received the bachelor's degree.

The school has a full-time librarian, whose position is filled each year by accepting bids, the lowest bidder obtaining the job. During the previous year the school board was able to secure a full-time librarian for \$12 a month, although this year it had to pay \$16. The superintendent receives an annual salary of \$1,520; the other teachers are paid \$1,000 each.

School 97 offers 21 units of high school work, including courses in algebra, plane geometry, English, Latin, citizenship, geography, world history, American history, general science, biology, typewriting, shorthand, commercial arithmetic, commercial law, and agriculture. The school records show no change in the curricular offering during the past five years.

In addition to these courses in which high school credit toward graduation is given, there is a boys' basketball squad, a girls' athletic club, a civics club, a science club, and an art club. The commencement program last year included the following numbers: music by pupils; address by the salutatorian (second highest ranking pupil), "Prepared for Better Things;" address by the valedictorian (highest ranking pupil), "The Door of Success is Labeled—Push!"; address by a professor from the University of Missouri.

The school has no health program. There is no county nurse available. Physical education consists of playground baseball, boys' and girls' classes meeting on alternate days at the beginning of the morning session of school.



There is no guidance program. The superintendent, though he is interested in knowing what types of records are kept in the better high schools, discourages the use of pupils' records by the teachers, since he believes such use may prejudice them against some pupils. Records in this school are statistics of attendance, scholastic marks, and credits earned by pupils. In addition, records concerning each member of the graduating class include the pupil's score made on an intelligence test, his scholastic rank in the class, and his average scholastic mark. Although no commendatory remarks appear, notations are sometimes made describing disciplinary cases. According to the superintendent, the purpose of this high school is "to build citizens."

In this school each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for participation in class work or other required activities. According to the superintendent's estimate, the average pupil spends about \$3.00 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class ring for \$7.50. The proceeds from the annual senior play are used to pay the rental fee for caps and gowns worn during the commencement exercises. The annual instructional cost per pupil enrolled in this school is \$48.08 for the current year.

The writer was visiting School 97 on the same day the representative of the State Department of Education was making his annual supervisory visit. The supervisor was in this school system about two hours, during which time he inspected both the elementary school and the high school. He spent the last 30 minutes of his official call telling stories to the superintendent while the writer was working in the office.

The following quotation is taken from a letter written during the current year from the State Department of Education to the secretary of the Board of Education following this annual official inspection:

"Your school is progressing nicely and the course of study is well organized. For the further improvement of your school we recommend that

- “1. increase the laboratory equipment
- “2. provide an approved encyclopedia for the high school.”

### School 98

School 98 is in a town of about 570 people. There are no important industries in this community except farming. The town has two churches, a weekly newspaper, and a parent-teacher association.

The high school building was constructed in 1926 at a cost of \$17,000. Since it contains only two classrooms, the high school pupils use, in addition, two classrooms in the elementary school building, a much older structure, located on the same grounds. These grounds, approximately three acres in area, are provided with a playground baseball diamond and a tennis court. When the writer inspected the school, water was standing on the tennis court, and ditches had been formed in numerous parts of the grounds as a result of erosion. The high school building scored 54 points out of a possible 284 on the checking list of building specifications. The walls throughout both buildings have areas of several square feet where the plaster has fallen off. In one room, extending from ceiling to floor, is a crack about an inch wide, which has been stuffed its entire length with rags and newspapers. In the elementary school building the walls display an almost unbroken network of pencil inscriptions. Both walls and doors are so encrusted with grime that it was impossible to determine their original color.

No classrooms in either building have bulletin boards, lockers, or bookcases, although one room has, nailed in one corner, an unpainted box where music is stored. Chairs are rickety and splintered. Each room has provision for artificial lighting by means of a single electric light socket suspended from the ceiling. However, in the study hall, the library, and some of the classrooms, there were no light bulbs.

Ventilation is provided through windows. Since in every room some of the window panes were partially broken out or entirely missing, an abundance of fresh air was available. In the four classrooms used by the high school pupils, 19 panes

were broken. In addition, several more were missing in the study hall. The superintendent expected to replace the broken glass, but was waiting until he needed an entire case. Window shades are faded, stained, and tattered.

The room used for science instruction contained the following equipment: three discarded automobile batteries partially dismantled, a few tin cans, some empty alcohol lamps, a dry cell, two ring-stands, a balance with about half the weights missing, a bicycle pump, four dinner plates, and some rocks. This room has no plumbing connections. Little laboratory work is attempted, according to the science teacher. Pupils kept no record of any experimentation which may have been done.

The room used for instruction in commercial subjects contains eight typewriters belonging to the school and rented to the pupils. Five more have been furnished by pupils. Color and variety are contributed to the room by the diversity of typewriting tables, which the pupils provide for themselves. Tables of oak, walnut or white enamel, tables plain or ornate, tables constructed from old sewing machines make up the collection. The instructor has a roll-top desk, the home-made lower part of which has been painted a bright blue.

The library is a room, approximately eight feet by twelve feet, with one window and no provision for artificial illumination. A desk in the center of the room leaves little additional space. The library, which was catalogued at one time, contains approximately 800 volumes, the following nine titles of which are on the selected list:

- Baneroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
Bassett, J. S., *Expansion and Reform, 1889-1926*  
Carpenter, H. A., and Wood, G. C., *Our Environment*  
Comstock, J. H., *Insect Life*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Hart, A. B., *American History Told by Contemporaries*  
Pieper, C. J., and Beauchamp, W. L., *Everyday Problems in Science*  
Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
Washington, B. T., *Up from Slavery*

According to the statement of the pupil in charge, a large percentage of the books have been lost. There were no magazines.

Although the gymnasium, which is located in the basement of the high school building, meets specifications in most of the items considered, the floors are not smoothly finished and the seats for spectators are of rough, unpainted lumber, as are the stairs leading to them from the second floor of the building. Pieces of plaster, several square feet in area, have fallen off the walls of the stage, which is at one end of the gymnasium. Some of these holes have been patched with plaster of another color. Across the front of the stage hangs a ragged curtain.

The office of the superintendent is on the second floor and can be reached only by ascending a creaking stairway and then passing through the study hall. The office is approximately eight by twelve feet in size and has no provision for artificial lighting.

This school has outdoor toilets.

The superintendent has the degree of Master of Arts from the University of Missouri. He and all the other teachers have bachelor's degrees from the same state teachers' college in Missouri. Two members of the faculty attended the teachers' college at irregular intervals for eight years before receiving their bachelor's degrees. One teacher has had two years of teaching experience; one, three years; one, eleven years; and the superintendent, six years. The superintendent receives a salary of \$1,125 a year. One of the teachers receives \$630; the other two are paid \$540 each.

The 20 units of high school work offered in School 98 include courses in general mathematics, algebra, English, citizenship, geography, American history, American problems, general science, biology, typewriting, bookkeeping, shorthand, and commercial law. Courses in biology, shorthand, and typewriting have been added to the program of studies during the last five years. Plane geometry has been dropped during this time.

Extra-curricular activities consist of chorus, band, basketball, volleyball, playground baseball, tennis, and a high school newspaper. The commencement exercises last year featured an address by a local minister.

The only attention given to the health of pupils is a required physical examination for pupils participating in athletic contests.

There is no guidance program. According to his statement, the superintendent tries to have personal conferences with each pupil in regard to the pupil's vocational plans. Last year half of the members of the graduating class enrolled in college. The superintendent assisted these pupils in selecting their college courses for the year. Pupil-records are kept on cards prepared for the purpose. Duplicate information is recorded in a loose-leaf book and kept in the local bank. These records contain for each pupil the address, telephone number, number of days in school, titles of books on which the pupil has given reports in English courses, scholastic marks, credits earned, and scholastic and athletic honors earned. A new and more extensive set of record cards is on hand and is to be used for succeeding classes.

The purpose of this high school, as stated by the superintendent, is "to give boys and girls the knowledge and attitudes that will help them to live in the community after they finish school."

Pupils furnish all textbooks and other supplies. A rental fee of \$1.50 a year is charged each pupil using a typewriter owned by the school. There are no other fees or dues for any class work or other required activity. According to the superintendent's estimate, the average pupil spends about \$1.50 a year for participation in voluntary extra-curricular activities. This includes dues of 15 cents a week for each member of the band and a charge of 50 cents for a season ticket to all athletic contests. In addition, each member of the graduating class is expected to purchase a class ring for \$6.50 and invitations to the commencement exercises for approximately \$1.00. He is also expected to rent for \$1.50 a cap and gown to be worn during the commencement exercises. The instructional cost per pupil enrolled is \$28.93 for the current school year.

The following recommendation is the only suggestion for improvement given in a letter written during the current year from the State Department of Education to the secretary of the Board of Education following the annual supervisory visit to this school:

**“Provide good fiction, good magazines, and a newspaper for the high school library.”**

### Summary

The towns in which the selected schools enroll between 50 and 100 high school pupils range in population from approximately 600 to 1,100. Each is in an agricultural community with few educational or recreational facilities other than those furnished by the school. Few playground facilities are provided in any of these schools. Buildings are entirely inadequate according to approved standards. While science courses are offered in all these schools, laboratory facilities are very limited, and in School 81, entirely lacking. School 97 has no auditorium and no gymnasium. The libraries in Schools 81 and 98 consist of a few old and poorly selected volumes placed in make-shift quarters. The administrative heads of two of these schools have the degree of Master of Arts from the University of Missouri. Most of the teachers in these schools have bachelor's degrees. Salaries range from \$540 to \$1,520. The number of units of high school work offered varies from 16 to 21. Little opportunity is afforded for participation in extra-curricular activities. None of the schools has any health program or guidance program. In these schools pupils furnish all textbooks and, with the exception of examination paper, all instructional supplies. There are no fees for class work or other required activities. The estimated expenditure by the average pupil for participation in extra-curricular activities is \$1.50 to \$3.00 a year. Participation in the various exercises connected with graduation costs each member of the graduating class approximately \$9.00 to \$11.00. The annual cost of instruction per pupil enrolled ranges from \$28.93 to \$48.08. Judged in terms of its letters written after the annual inspection, the State Department of Education has few suggestions to make for the improvement of these schools. All these schools are officially rated as first-class high schools by the State Department of Education.

## CHAPTER V

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FROM 150 TO 200 PUPILS

#### School 167

School 167 is located in a town of about 1,200 people. This immediate locality has no important industries other than farming. The town has five churches, a weekly newspaper, and a parent-teacher association. In addition, very recent organizations include a chamber of commerce, Boy Scouts, and Camp Fire Girls. Three miles away there is a town of some 7,000 which has numerous educational facilities, including a school system which is generally considered to be quite superior.

The school building houses the pupils in the six elementary grades as well as those in the six high school grades. The main part of the building was constructed in 1895, although in 1925 four classrooms and the gymnasium were added. The total cost of the building, according to the school records, was \$75,000. The grounds, which consist of about four acres, were at one time covered with large trees. At present most of these trees have been cut down to a height of approximately 15 feet. Because of the interference offered by these tall stumps, it is almost impossible to play any outdoor games. No special provisions for organized play have been made on the school grounds. The building meets specifications in 88 of the 284 items considered.

Floors in the building are uneven and rough. Window space is too small to meet lighting specifications. Heavy draperies at the windows reduce further the natural illumination of the rooms. The majority of the classrooms have cabinets or bookcases, most of which seemed in need of repair. There are no bulletin boards.

The room used for science classes contains a small table, the teacher's desk, some chairs, and a sink with running water. For

experimental work the following apparatus is provided: several coils of wire, some magnets, a few dry cells, two steam engine models, two Harvard balances, one test tube rack, twenty test tubes, one microscope, several bottles, and a few chemicals.

The room used for classes in commercial subjects is lighted by three electric lights in various parts of the room. These lights are connected by ordinary wiring with the central fixture in the ceiling and are suspended in place by means of strings. The improvised wiring is not protected by additional insulation. In typewriting classes pupils furnish their own typewriters or rent them from the school.

The equipment for classes in household arts consists of three sewing machines and an ironing board.

There is no auditorium, and the gymnasium is not equipped to serve as an auditorium. The gymnasium meets specifications in most of the items considered. It has an electric score-board to be used for basketball games. For the storing of athletic equipment more space is provided than is now used. Two gymnasium mats have recently been donated to the school by the parent-teacher association. New uniforms have just been purchased for the basketball team. In the basement showers and dressing rooms are provided for both the boys and the girls. The boys have four dressing rooms, all but one of which would be in total darkness except for artificial illumination. The girls' dressing room, which is triangular in shape and measures about nine feet by twelve feet by fifteen feet, has ventilation and natural illumination only when the door is open. Equipment in this room consists of a wooden bench, a toilet, and the shower previously mentioned. Since this room connects with the coal bin, which is considered larger than necessary, it is planned to increase the size of the dressing room by building a partition across the coal bin.

A window about two feet square connects the study hall with the library, which is six feet wide and twenty-one feet long. The library has been made by building a partition across one end of a classroom, and is entered only through this classroom. Books were catalogued at one time. While the library contains 476 volumes, the only title from the selected list is Gayley, C.



M., *Classic Myths in English Literature and in Art*. The pupil-librarian showed the writer the most recent acquisition to the library—a set of *Nations of the World* (64 volumes). The preface was dated 1867, although the printing seems to have been done in 1898. The only magazine coming regularly to the school is *Collier's*.

The superintendent's office, a room approximately ten feet square is located on the first floor of the building. In the corridor in front of the office are several upholstered chairs and rocking chairs to be used by people waiting to see the superintendent.

The superintendent, who has the degree of Master of Arts from the University of Missouri, has been in school work for 14 years. He has been in this school since the middle of last October, the former superintendent having accepted a position elsewhere at that time. The superintendent teaches daily one class in seventh grade agriculture, one in tenth grade agriculture, one in algebra, one in seventh grade spelling and handwriting, and one in eighth grade spelling and handwriting. The class in tenth grade agriculture meets for two 40-minute periods daily; the others meet but one period. The superintendent is in charge of the study hall during one 40-minute period daily. He is also responsible for supervising the instruction in the six elementary grades as well as in the six high school grades.

The principal teaches daily one class in eighth grade general science, one in ninth grade general science, one in seventh grade arithmetic, one in eighth grade arithmetic, one in boys' physical education, and one in girls' physical education. Each of these classes meets for a period of 40 minutes daily, with the exception of the class in ninth grade general science, which requires double periods. In addition to these duties the principal is in charge of the study hall daily for a period of 40 minutes. He also coaches the basketball team. He was employed about the middle of the first semester of this year, when his predecessor left for a better position.

The wife of the former superintendent was principal of the high school until about a month after the new superintendent

took office. She is now teaching mathematics and commercial subjects.

The superintendent receives a yearly salary of \$1,350; the principal receives \$720, while the salaries of the other teachers range from \$540 to \$720 a year.

School 167 offers 21 units of approved work in the following subjects: algebra, plane geometry, business arithmetic, English, Latin, community civics, geography, world history, American history, Missouri state history, general science, typewriting, junior business training, sewing, agriculture, and music. During the past five years the courses in Missouri state history, geography, and sewing have been added to the program of studies. No courses have been dropped during this time.

There are no extra-curricular activities other than athletics. There is no health program. There is no evidence of a guidance program. A large number of blanks and record forms, however, were prepared but not used by the former superintendent. According to the statement of his successor, these blanks and record forms were apparently made for publicity purposes while the former superintendent was campaigning for another position. In the attic is a large roll of charts printed on sign cloth, which show certain school statistics that the present superintendent believes have little value. A teachers' manual of administration was also prepared by the former superintendent. This manual illustrates a great many forms and records purported to have been used in the school, the majority of which the present superintendent has never been able to find. The former superintendent did secure a better position.

The school has a testing program for measuring the progress of pupils. Each pupil is given a written examination in all classes every Monday. At the end of each six-week period another examination is given to all members of each class. Examinations are retained and used from year to year. The only item considered in determining scholastic marks is the pupil's record on the examination covering the work of the preceding six weeks. Those pupils who fail to make a passing score on this test are allowed to attempt it again within three weeks. If a pupil makes a passing score on the second attempt, that

score becomes the official mark for the six-week period. If the pupil is unable to pass the examination on the second attempt, he is not allowed to continue in that class. The passing mark on an examination is 50 per cent of the highest score made by a member of the class. The superintendent says superior pupils often deliberately make a lower mark than is necessary in order that the minimum passing score may be lowered for the benefit of friends who are less gifted. Sometimes, he says, these superior pupils study unusually hard for a week or two in order to raise the passing minimum score so that certain pupils of low ability will be unable to make a passing mark.

Cooperation seems to be lacking in this school. Members of the teaching staff were careful to point out that all desirable features of the school program were due to the efforts of the former superintendent. School 167 is called a junior-senior high school. According to the superintendent, the reason for such classification is that the pupils in the seventh and eighth grades meet classes on the same floor as the pupils in the four upper grades. The superintendent says he considers the purpose of this high school to be "college preparation."

In this school each pupil furnishes all his textbooks and other supplies, with the exception of paper for examinations. Each pupil enrolled in a science course pays a fee of \$1.00 a year. A pupil who enrolls in a typewriting class either furnishes his own typewriter or pays a fee of \$15.00 a year. According to the superintendent's estimate, the average pupil spends about \$2.00 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class ring for \$7.00, purchase invitations to the commencement exercises for ten and one-half cents each, and pay a rental fee of \$1.50 for a cap and gown to be worn during the commencement exercises. Instructional costs in this school per pupil enrolled are \$30.72 for the current year.

The following recommendation is the only suggestion for improvement given in a letter from the State Department of Education to the secretary of the Board of Education following this year's annual supervisory visit to School 167:

“For the further improvement of your school we recommend that you continue your improvement and also continue to add to your grade and high school libraries.”

### School 188

School 188 is located in a town of about 2,000. The town has a moving picture theatre, six churches, a small medical clinic, two weekly newspapers, an ice cream factory, a tomato cannery, a women's club, a chamber of commerce, and a parent-teacher association.

The school building houses the pupils in the eight elementary and in the four high school grades. About half of the present building was erected in 1912; the other part, in 1925. The total cost of the school building, according to the school records, was \$80,000. The grounds, which consist of about six acres, have a football field, four tennis courts, and parking space for automobiles. This building scored 116 points out of a possible 284 on the checking list of building specifications.

Several of the class rooms contain bulletin boards. Some have bookcases. In most of the rooms artificial light is provided by means of an electric light bulb fastened at the ceiling.

The science classes are conducted in a large classroom fitted with chairs, a teacher's desk, and a small table. In one corner is a sink with running water. An air pump, a bell jar, and several other pieces of equipment formerly used in physics classes are available. There are a few chemicals for use in general science and biology classes. The equipment for use in biology classes consists of a microscope, a hand lens, and some flasks, beakers, and test tubes. Examination of pupils' notebooks indicated that little experimental work is done by either the pupils or the teacher.

The commercial classes are held in two connecting rooms, one provided with typewriters and the other with bookkeeping tables. The rooms used for home economics classes contain built-in lockers for the use of pupils, a number of tables and sewing machines, stoves, sinks, and other pieces of equipment usually found in a kitchen. The room used for agriculture classes contains collections of weeds, samples of seeds, many

charts and pictures, several hundred bulletins, and a large bulletin board. The agriculture shop is a small brick structure outside the main building. It is equipped for general farm shop work, having work-benches, a forge, and most of the more common shop tools.

The gymnasium, which has seating space for several hundred people, is used as an auditorium when the public is invited to the school. This gymnasium meets specifications in most of the items considered. Another room, the study hall, serves as an auditorium for assemblies of the student body when additional space is not required for visitors. Dressing rooms and showers for boys and girls are in the basement near the gymnasium.

The library is adjacent to the study hall and is separated from it by a glass partition and a door. The reading room of the library seats about ten pupils. The library has storage space for more books than are available, has a loan desk extending the length of the room (about 30 feet), a librarian's desk, a magazine rack, and a bulletin board. There are about 1,600 volumes here, catalogued, and partially card-indexed. Of the 1,600 volumes, the following 26 were found whose titles are on the selected list:

Blackmore, R. D., *Lorna Doone*

Bullen, F. T., *Cruise of the Cachalot Round the World after Sperm Whales*

Carpenter, H. A., and Wood, G. C., *Our Environment*

Cheyney, E. P., *Short History of England*

Clemens, S. L., *Life on the Mississippi*

Cooper, J. F., *Deerslayer*

Dickens, Charles, *David Copperfield*

Eliot, George, *Mill on the Floss*

Elson, H. W., *History of the United States of America*

Gayley, C. M., *Classic Myths in English Literature and in Art*

Goldsmith, Oliver, *Vicar of Wakefield*

Hart, A. B., *American History Told by Contemporaries*

Hill, H. C., *Community and Vocational Civics*

Kipling, Rudyard, *Captains Courageous*

Kitson, H. D., *How to Find the Right Vocation*

Morley, C. D., *Parnassus on Wheels*

Packard, L. O., and Sinnott, C. P., *Nations as Neighbors*

Pupin, M. E., *From Immigrant to Inventor*

Riis, J. A., *Making of an American*  
Ross, E. A., *Civic Sociology*  
Standard Dictionary, *Funk and Wagnalls New Standard Dictionary of the English Language*  
Taussig, F. W., *Tariff History of the United States*  
Towne, E. T., *Social Problems*  
Washington, B. T., *Up from Slavery*  
White, S. E., *Daniel Boone, Wilderness Scout*  
Wilkinson, Mrs. M. O., *Contemporary Poetry*

Inspection of the library shows that many of the 1,600 volumes are duplicate copies, textbooks, and parts of sets of reference books. Most of the books in the library are used in classes in English or in social studies.

The following magazines are taken regularly by the school:

*American Boy*  
*Country Gentleman*  
*Current History*  
*Good Housekeeping*  
*Hygeia*  
*Parents' Magazine*  
*Review of Reviews*

In addition, copies of the following magazines were also found in the library:

*National Geographic Magazine*  
*Saturday Evening Post*  
*Time*

The librarian teaches one class in English and supervises the library the remainder of the time. A number of student-assistants help in the library. About \$200 a year, not including salaries, is put into the budget for library purposes.

The principal's office is a classroom which has had a low partition built across the center of it. This room contains a desk, a table, a metal filing cabinet, and running water. The superintendent's office suite has a waiting-room, a storeroom, and a private office containing a metal filing cabinet and a fire-proof safe. Immediately adjacent to the office is a room used as a health clinic.

The superintendent has the degree of Master of Arts from the University of Missouri and has attended Harvard University several summers. The principal attends the University of Missouri during the summer sessions. All the teachers have bachelor's degrees, although none except the superintendent has the degree of Master of Arts. Salaries range from \$765 to \$1,650 a year.

Twenty-nine units of high school work are offered in this school. These include courses in elementary algebra, advanced algebra, plane geometry, arithmetic, English, public speaking, dramatics, citizenship, geography, world history, American history, American problems, general science, biology, typewriting, bookkeeping, shorthand, home economics, and agriculture. In the past five years the courses in advanced algebra and arithmetic have been added to the program of studies. During this time Latin is the only subject which has been dropped.

In addition to the courses in which high school credit toward graduation is given, the following extra-curricular activities are available to pupils:

- Journalism Club
- Future Farmers of America
- Home Economics Club
- Honor Society (scholastic)
- Glee Club
- Chorus
- Boys' Athletic Letter Club
- Girls' Athletic Letter Club
- Boys' Basketball
- Girls' Basketball
- Football
- Baseball
- Tennis
- Barkettes (a "pep" organization)

Just preceding the annual commencement exercises a "senior night" program is held. The program last year was as follows:

- School Song
- Welcome
- Salutatory

Class History  
Duet  
Class Poem  
Class Prophecy  
Graduation  
Class Will  
Piano Solo  
Valedictory  
Awards  
Farewell Address

The annual commencement exercises consist chiefly of an address by someone from outside the school system.

Nothing is attempted in the way of a health program, except that annual examinations are given pupils by the local physicians.

The superintendent and the principal report that four years ago, when they came to this school, it was very poorly organized. The only pupil-records had been kept on sheets of paper of various kinds, just as each teacher happened to record the scholastic marks of her own pupils. These papers were left in a pile on the former superintendent's desk. Many pupils are believed to have graduated with one or two units short of the required amount of credit. There were no financial records. In fact the new administration was presented with 180 dollars' worth of old bills, for which no record could be found. Now, a pupil-record system has been installed. Three copies of permanent records are made, one kept in the superintendent's office, one in the principal's office, and one in the bank. A guidance record form has been designed and has been in use a year. This record includes such items as scholastic ability, intellectual ability and aptitude, initiative, integrity, leadership, social adaptability, and clean mindedness. By means of a five-point scale every pupil is rated on each of these qualities. This guidance record also includes such items as "occupational choice," "probability of college training," "greatest interest outside of school," "most interesting subject," "most difficult subject," and "working part way through high school." Space is provided for recording each pupil's extra-curricular activities, honors, and awards while in high school, as well as certain



activities for five years after the pupil's graduation. Inspection of the file shows that the majority of these records are completely filled out. Numerous record forms are used in office routine. A financial accounting system has been installed.

For purposes of guidance pupils are divided into groups, called "home-room groups," of 25 or 30 pupils each. Once a week each of these groups meets with its home-room sponsor, one of the teachers. The principal has formulated a mimeographed bulletin for use in guidance in the home-rooms. This bulletin contains 44 pages of material designed to help the home-room sponsors conduct the guidance program for the year. Some of the features of this bulletin are an introductory part explaining the meaning of guidance, a section explaining the duties of home-room presiding officers, and a bibliography of guidance books in the high school library. The bulletin also contains two questionnaires to be filled out by each pupil. Some of the items in the first questionnaire are as follows: "Do you intend to go to college? What college? What course?" "Will you have to earn part of your expenses, all or none?" "Name several books you enjoy reading most." "Have you been under the care of a doctor recently? If so, for what?" "Do you have a home work shop?" "Have you a 'hobby'?" A total of 33 major points is covered in this questionnaire. The second questionnaire is a two-page list of personal characteristics on which each pupil rates himself.

The following home-room programs are suggested for the senior home-room:

#### First Semester

- I. Parliamentary Procedure.—2 meetings
- II. Personality.—4 meetings
- III. Vocations.—4 meetings
- IV. Will College Pay?—2 meetings
- V. Facing the Future.—1 meeting
- VI. When Opportunity Comes.—2 meetings
- VII. Mental Hygiene.—3 meetings
- VIII. Christmas Program to be arranged by home-room.
- IX. Courtesy.—2 meetings
- X. Leisure Time.—1 meeting
- XI. Open Forum.

## Second Semester

- I. Loyalty.—1 meeting
- II. Home Life.—2 meetings
- III. Family Relations.—2 meetings
- IV. Social and Ethical Choices.—1 meeting
- V. Religion.—2 meetings
- VI. Happiness.—2 meetings
- VII. Some Current Problems.—2 meetings
- VIII. World Relationships.—2 meetings

Additional pages in the bulletin give elaborations of these topics. Similar programs are suggested and tentatively worked out for each of the other home-rooms.

A special experiment is being tried with the senior class the last quarter of the year. With the hope of accustoming seniors to the greater independence of college life, each senior who expects to attend college next year is excused from all study hall duty or attendance at school when not in class, upon presenting the written approval of such a policy from his parents. Although the ultimate success of the plan has not yet been determined, the school officers feel that it has given sufficient promise to be attempted from the beginning of school the coming year.

Pupils serve as assistants to members of the faculty in School 188. The principal has two boys almost every hour of the day doing office work for him. The superintendent is assisted in his clerical work by 12 girls. Almost all the records are kept by pupils under the supervision of the principal or the superintendent. No school money is handled by pupils.

According to the superintendent, the purpose of this high school is "to prepare the pupil to adapt himself to life situations."

In School 188 each pupil furnishes all his textbooks and other supplies with the exception of examination paper. Pupils do not pay fees or dues for any class work or other required activity except a library fee of 75 cents for each pupil enrolled in English. An activity ticket, costing \$2.00, payable in weekly installments of ten cents each, admits pupils to all extra-curricular activities. Pupils who cannot afford to buy these

tickets are allowed to work for the school to pay the weekly installments. Since there are no dues, organizations which require more money than is allotted them from the activity ticket fund raise the necessary sum by means of food sales and other projects conducted by the group. Each member of the graduating class is expected to purchase a class pin for \$4.00 and invitations to the commencement exercises for approximately \$1.00. He is also expected to pay a rental fee of \$1.50 for a cap and gown to be worn during the commencement exercises. The cost of instruction in this school per pupil enrolled is \$49.55 for the current year.

In the letter to the secretary of the Board of Education of this district, following this year's annual visit by a representative of the State Department of Education, the following statement was made:

"We note that your school is in very good condition. Your teachers all seem to be well qualified, and there seems to be splendid cooperation between them and the students." No recommendations for improvement were made.

### School 192

School 192 is located in a town of some 1,200 population in an agricultural community. The town has a cold storage plant for farm produce, a public library, a golf course, a moving picture theatre, a weekly newspaper, five churches, and a small hospital. Organizations in this town include Boy Scouts, Camp Fire Girls, a Lions' Club, a commercial club, and three women's clubs.

The high school is in a separate building, although on the same grounds as the elementary school. The high school building was constructed in 1927 at a cost of \$85,000. The grounds, which consist of several acres, are partially landscaped. A football field is provided. The high school building scored 149 points out of a possible 284 on the checking list of building specifications.

Classrooms meet specifications in regard to lighting. Each room is provided with a bulletin board and a bookcase. The

science laboratory consists of two rooms. One room is fitted with a desk containing a sink with running water. The other room has, extending its entire length, two tables, parallel to each other, containing water troughs and faucets. These tables are dirty, stained, and broken. Some chemicals and glassware for experimental work are kept in this room. A Kipp generator for making gases, one microscope, one rotator, and one optical disk make up the chief part of the equipment available for laboratory work. Across the corridor from the laboratory is a third room used for science classes but not fitted with any special equipment for scientific experiments or demonstrations.

The commercial department consists of two rooms, one room equipped with typewriters and the other with tables used by the classes in bookkeeping. The home economics department is furnished with electric cooking plates and with sewing machines. The vocational agriculture shop is outside the main building and contains a forge, a grindstone, some work-benches, some drills, and other common tools. A room provided for music classes contains a piano, some chairs, and numerous pennants and ribbons won by contestants.

A gymnasium, which meets specifications in most of the items considered, forms the stage of an auditorium seating about twice the enrollment of the school.

The library, which extends along the front of the study hall, contains 1,219 volumes, many of which are duplicate copies and textbooks no longer used. For example, there are several copies of a geography textbook printed in 1900. Books have been catalogued once but are now in disorder. There is an accession book but no card index. A number of reference sets are available, including the following:

*Collier's New Encyclopedia*  
*Compton's Pictured Encyclopedia*  
*The Encyclopedia Americana*  
*Harpers' Encyclopedia of the United States*  
*International Encyclopedia*  
*The World Book Encyclopedia*

The following nine books were found whose titles appear on the selected list:

Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
Blackmore, R. D., *Lorna Doone*  
Clemens, S. L., *Life on the Mississippi*  
Dickens, Charles, *David Copperfield*  
Hart, A. B., *American History Told by Contemporaries*  
Kipling, Rudyard, *Captains Courageous*  
Mukerji, D. G., *Gay-Neck; the Story of a Pigeon*  
Parkman, Francis, *Boys' Parkman*  
Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*

The only magazines coming regularly to the school are *Current History* and *Current Science*.

Office space includes a waiting-room and quarters for the superintendent, the principal, and the secretary. In the superintendent's office there is a vault for valuable papers.

All the teachers except one have bachelor's degrees, although, with the exception of the superintendent, none has the degree of Master of Arts. The superintendent teaches two classes in elementary algebra. He has a regular schedule of visitation for the elementary school, but says he does not have time to visit many high school classes. The principal teaches two classes in biology, one in general science, and one in physics. In addition, he coaches the girls' basketball team. The superintendent receives a yearly salary of \$1,920; the principal, \$900. Salaries for the other teachers range from \$855 to \$1,500 a year.

This school offers 36 units of high school work in the following subjects:

General Mathematics  
Elementary Algebra  
Advanced Algebra  
English  
Latin  
Citizenship  
High School Geography  
World History  
American History

American Problems  
General Science  
Biology  
Physics  
Chemistry  
Typewriting  
Bookkeeping  
Shorthand  
Business Arithmetic  
Office Practice  
Home Economics  
Agriculture  
Music

The following extra-curricular activities are available to pupils:

Commercial Club  
Vocational Home Economics Club  
Future Farmers of America  
National Honor Society  
Dramatics  
Debating  
Boys' Glee Club  
Girls' Glee Club  
Piano  
Band  
Orchestra (Beginners)  
Orchestra (Advanced)  
Girls' Athletic Letter Club  
Boys' Athletic Letter Club  
Boys' Basketball  
Girls' Basketball  
Football  
Track

Commencement week last year included each of the following activities on successive days:

Baccalaureate Service  
Cap and Gown Day  
Senior Play  
May Day and Class Day Exercises  
High School Picnic  
Commencement Exercises

The commencement exercises had as their chief attraction an address by a local minister. The superintendent is planning a new type of commencement, the theme of which is the three-hundredth anniversary of the American high school.

There is no health program. The superintendent states that he is dissatisfied with his guidance program and desires to improve it. Pupil-records consist of scholastic marks and credits earned and for some pupils scores made on intelligence tests. A financial accounting system has been installed. The purpose of the high school, as stated by the superintendent, is "to serve the community and the state."

In this school each pupil furnishes all his textbooks and other supplies with the exception of paper for examinations. Each pupil enrolled in science classes pays a fee of 75 cents a year. Each pupil in the typewriting class pays a fee of \$1.00 a month for the use of a typewriter. An activity ticket admitting a pupil to all extra-curricular activities of the school, except the junior and senior plays, may be purchased for \$2.25, \$1.00 to be paid in cash, the remainder in installments. In addition, each member of the graduating class is expected to purchase a class ring for \$7.00 and commencement invitations for ten cents each. The proceeds of the senior play are used to pay the rental fee on caps and gowns worn by the graduating class during the commencement exercises. The cost of instruction per pupil enrolled in this school is \$44.22 for the current year.

In the letter to the secretary of the Board of Education of this district, following the annual visit during the current year by a representative of the State Department of Education, this statement was made:

"For the further improvement and maintenance of your high standards some additions might well be made to your laboratory equipment."

The letter contained no other recommendations for improvement.

### Summary

The towns in which the schools enroll between 150 and 200 range in population from approximately 1,200 to 2,000. Each

town is in an agricultural community. The towns in which Schools 188 and 192 are located have some industries other than farming. These two communities have a number of recreational and educational facilities in addition to those furnished by the schools. School 167 has limited playground facilities. Schools 188 and 192 have football fields and other facilities for organized play out-of-doors. None of the buildings meets generally accepted standards for high schools. All of the schools have gymnasiums. The gymnasiums in Schools 188 and 192 may be adapted for use as auditoriums. Library facilities in School 167 consist of a few old and poorly selected volumes. The libraries in Schools 188 and 192 contain more volumes and offer a wider range of commonly approved titles. From one to seven magazines are taken by each school. The superintendent of each of these schools has the degree of Master of Arts. Most of the teachers have bachelor's degrees. Salaries range from \$540 to \$1,920. The number of units of high school work offered varies from 21 to 36. Little opportunity is afforded for participation in extra-curricular activities in School 167. Schools 188 and 192 provide a number of such activities. None of the schools has a health program. Schools 167 and 192 give little guidance to pupils. School 188 has a number of provisions for guidance. In these schools pupils furnish all textbooks and other instructional supplies, except examination papers. Fees range from 75 cents a year for pupils enrolled in science in School 192 or in English in School 188 to \$15.00 a year for pupils taking typewriting in School 167. The estimated expenditure per pupil for participation in extra-curricular activities varies from \$2.00 to \$2.25 a year. Participation in the various exercises connected with graduation costs each member of the graduating class approximately \$6.50 to \$10.00. The annual cost of instruction per pupil enrolled ranges from \$30.72 to \$49.55. The letters to these schools written by the State Department of Education after this year's annual inspection contained few suggestions for improvement.



## CHAPTER VI

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FROM 300 TO 500 PUPILS

#### School 356

School 356 is located in a town of about 5,000 people. This town, which is a residential suburb of a large city, enjoys all the advantages of a country community, and yet it is within one street-car fare of all the benefits of the city. Among the resources of the city are a large public library, many large churches, a number of museums, an art gallery, a widely known botanical garden, a large municipal zoo, numerous parks, golf courses, swimming pools, theatres, a symphony orchestra, an opera, a number of radio broadcasting stations, two universities, several colleges, large hospitals, a municipal airport of note, and numerous factories and other industries.

The main part of the high school building, the whole of which is fire-proof, was constructed in 1930, although in 1934 two classrooms were added. The total cost of the building, according to the school records, was \$107,000. The grounds surrounding the structure consist of a front yard about 20 feet deep extending the width of the building and a somewhat smaller strip along one side. All available space is planted in grass or shrubbery. There is no space set aside for use as a playground, although at a distance of several blocks a baseball field has been rented for the use of the school's baseball squad. This building, which scored 175 points out of a possible 284 on the checking list of building specifications, was designed by an architect who is nationally known and generally considered to be an authority in the field of school architecture.

Classrooms meet specifications in almost all the items considered. Each one contains bulletin boards, blackboards, storage space for books and supplies, as well as built-in wardrobe space

for the use of the teacher. Semi-direct lighting is provided by means of from four to six electric lights near the ceiling of each room. Steam radiators extend the length of each classroom beneath the windows. The heating system has automatic temperature control. Windows are provided with glass deflectors so that ventilation may be obtained with a minimum of drafts in the room. In addition, to insure ventilation, School 356 is equipped with a mechanical system which keeps the air in circulation throughout the building at all times. All classroom floors are covered with an inlaid sound deadening material. Corridor floors and stair treads are made of terrazzo.

The laboratory used for chemistry and physics classes contains a teacher's desk especially designed to serve in making classroom demonstrations. Six tables are provided for the use of pupils. The tops of these tables are made of a black composition material which resists the action of acids and of fire. Each table is supplied with hot and cold water, gas, and four electrical outlets. The sinks are equipped with removable covers, which are flush with the top of the tables, thereby allowing flat table surfaces when the sinks are not in use. Movable metal uprights for the tables are available for such experiments as may require them. A built-in fume-hood, which is used in certain experiments to avoid contaminating the air of the classroom with unpleasant or dangerous gases, is equipped with a separate fan, in addition to that used for the regular ventilation of the building. A storeroom adjacent to the class-room is used for storing chemicals and equipment, and also as a dark room for such experimental work as may require absence of light.

The biology laboratory, in which both general science and biology classes meet, is provided with tables for the use of pupils and with one sink, which has hot and cold water. This laboratory has a number of glass cases containing zoological and botanical specimens for display and demonstration purposes. There are also window boxes containing growing plants. Several microscopes are included in the equipment for biology classes.

The rooms used by the commercial department include one room fitted with small tables and typewriters and another room

containing larger tables used by the bookkeeping classes. A glass partition between these rooms makes it possible for one teacher to supervise classes in both rooms at the same time.

The combination gymnasium and auditorium has been especially treated to improve its acoustical properties. In the gymnasium are basketball courts, volleyball courts, handball courts, an indoor baseball diamond, and several wrestling mats. An electrically operated score-board has been provided for use in basketball games. The stage is equipped with footlights, colored floodlights, and spotlights and has heavy velvet curtains. Dressing rooms for boys and girls have showers, mirrors, and clothing lockers. Individual dressing booths are provided for the girls.

The library contains reading tables and chairs enough to accommodate about 80 pupils at one time. Three sides of the room were at one time lined with adjustable book-shelves. Because of the loss of a number of books, the shelves have been removed and all the books have been transferred to a small adjacent room which was originally meant for a library workroom. The library contains about 1,600 catalogued and indexed volumes, the following 22 of which are on the selected list:

- Austen, Jane, *Pride and Prejudice*  
Blackmore, R. D., *Lorna Doone*  
Bullen, F. T., *Cruise of the Cachalot, Round the World  
after Sperm Whales*  
Chase, Stuart, and Schlink, F. J., *Your Money's Worth*  
Cooper, J. F., *Deerslayer*  
Davis, W. S., *Day in Old Athens*  
Delano, J. A., *American Red Cross Text-book on Home  
Hygiene*  
Dickens, Charles, *David Copperfield*  
Elson, H. W., *History of the United States of America*  
Gayley, C. M., *Classic Myths in English Literature and  
in Art*  
Grenfel, W. T., *Adrift on an Ice-pan*  
Hart, A. B., *American History Told by Contemporaries*  
Jeans, J. H., *Stars in Their Courses*  
Kipling, Rudyard, *Captains Courageous*  
Lytton, E. G., *Last Days of Pompeii*  
Magruder, F. A., *National Governments and International  
Relations*

Milton, John, *Complete Poetical Works*  
Morley, C. D., *Parnassus on Wheels*  
Riis, J. A., *Making of an American*  
Slosson, E. E., *Creative Chemistry*  
Standard Dictionary, *Funk and Wagnalls New Standard*  
*Dictionary of the English Language*  
Towne, E. T., *Social Problems*

Copies of the following six magazines were found in the library:

*Collier's*  
*Current Events*  
*Liberty*  
*Nation's Business*  
*Saturday Evening Post*  
*Time*

The librarian said that most of these magazines come irregularly as different individuals see fit to donate them. The library is also used as a study hall where pupils are expected to spend all their time during the school day when not in class.

The office suite consists of a waiting-room, a general office, a private office for the superintendent, and a private office for the principal. The principal's office contains an electric master clock which operates a clock in each classroom and also controls the bell system of the school.

All members of the faculty have bachelor's degrees. The superintendent, the principal, and four of the other teachers have the degree of Master of Arts. Teachers' salaries range from \$1,092 to \$2,024 a year. The superintendent receives \$3,324.

The school offers 29 units of instruction in the following subjects:

Elementary Algebra  
Advanced Algebra  
Plane Geometry  
Solid Geometry  
Trigonometry  
English  
Latin

Spanish  
French  
Citizenship  
Geography  
World History  
American History  
Economics  
Sociology  
General Science  
Biology  
Physics  
Chemistry  
Typewriting  
Bookkeeping  
Shorthand  
Mechanical Drawing  
Art

During the last five years the following courses have been added to the program of studies: mechanical drawing, art, chemistry, shorthand, typewriting, and bookkeeping. During this time no courses have been dropped.

In addition to these courses in which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

Journalism Club  
Science Club  
Honor Society  
Dramatics Club  
Debating Club  
High School Newspaper  
Annual  
Girls' Glee Club  
Operetta  
Orchestra  
Band  
Girls' Volleyball  
Boys' Volleyball  
Girls' Basketball  
Boys' Basketball  
Baseball  
Wrestling  
College Club  
Student Council

Commencement exercises last year consisted chiefly of music by high school pupils and an address by a university professor.

This year an attempt has been made to carry out a remedial health program. Nurses were employed for two months of the year. All pupils were examined by the nurses, by a committee of local physicians, and by a committee of local dentists. The local Society for the Prevention of Blindness examined the eyes of each pupil. Pupils were urged to secure such remedial work as was needed. A follow-up record was kept of each case. According to the school records, 290 cases of remediable defects were discovered. There were eight cases considered non-remediable. Of the 290 cases of remediable defects, 138 were at least partially corrected, according to the school records. These partially corrected cases were classified as follows:

Eyes	34
Teeth	77
Skin	7
Weight	20

Of the 37 pupils who were found to have defective vision 34 secured glasses.

The local Lions' Club furnished glasses to pupils who needed them but who were financially unable to purchase them. The Lions' Club also supplied milk for pupils who were underweight and who could not afford to purchase it. The Mothers' Club also contributed to the health program in a financial way. According to the principal, a more extensive remedial health program is to be attempted next year.

In addition to the records concerning the physical condition of pupils, certain other records are kept. These statistics include scholastic marks and credits earned by the pupil, nationality of parents, occupation of parents, probability of pupil's attending college, and scores made by the pupil on intelligence tests. The school program of guidance consists chiefly in talks by local business and professional men concerning their own vocations, in field trips to industrial establishments, and in meetings, held for the purpose, and sponsored jointly by this school, neighboring schools, and the Y. M. C. A.

According to the statement of the principal, the purpose of this high school is "to train boys and girls efficiently to take their place in society and to be useful citizens."

In School 356 each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for any class work or other required activity. According to the principal's estimate, the average pupil spends about \$3.00 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class pin for \$4.25 or a class ring for \$6.35. Ten invitations to the commencement exercises are furnished each pupil free of charge. By their own decision girls in the graduating class are expected to purchase simple white dresses to be worn during the commencement exercises. These dresses with accessories cost about \$7.50 each. Boys in the graduating class may dress as they choose for the occasion. The instructional cost per pupil enrolled is \$40.46 for the current year.

The following recommendations are the only suggestions for improvement given in a letter from the State Department of Education to the secretary of the Board of Education following this year's annual supervisory visit to School 356:

"To further improve your school the ensuing year we suggest that you make replacements and additions to your library which is generally deficient and consider the addition of one more teacher to your staff."

### School 448

School 448 is located in a town of about 7,000 in a farming community. The town has a public library, a park, a golf course, a swimming pool, a number of moving picture theatres, a junior college, a hospital, an airport, a daily newspaper, a cob pipe factory, and a shoe factory. There are also organizations of Boy Scouts, Camp Fire Girls, women's clubs, and service clubs.

The school building houses the pupils in the six grades of the junior-senior high school. This building was constructed in 1914 at a cost of \$78,000 and since then has had no important additions. The grounds, which consist of approximately one-

half acre, have no provisions for any kind of organized play. The school rents an athletic field from the local junior college when such a field is required. The three-story building scored 157 out of a possible 284 points on the checking list of building specifications.

Most of the classrooms contain blackboards, bulletin boards, and bookcases. Some contain storage cabinets for supplies. Classrooms meet specifications in most of the items considered.

The science laboratory contains numerous pieces of equipment used in physics and general science classes. The laboratory is supplied with hot and cold water, gas, and electricity. A rectifier is available for producing a direct current from the city electrical supply of alternating current. A fume-hood is provided to be used in certain experiments to prevent the contamination of the air of the classroom by unpleasant or poisonous gases. A projection lantern is available for such demonstrations as the science instructor considers desirable in his classes.

One of the rooms used for classes in commercial subjects contains typewriters; a second room is furnished with tables used in bookkeeping classes; and the third room is supplied with adding machines.

Home economics laboratories are provided with equipment to be used in sewing and in preparing and serving meals. The home economics classes, according to the principal, often serve meals to the local chamber of commerce, the service clubs, and the Board of Education.

The shop used by classes in vocational agriculture and industrial arts meets specifications in most of the items considered. A number of the machines in this shop have been designed by the instructor and built by pupils under his direction.

The gymnasium does not meet generally approved standards in such items as size, ventilation, and special arrangement for games. The gymnasium of the elementary school is used for all high school basketball games to which the public is invited. The auditorium, a room large enough to seat the student body, is fitted with the same type of seats and desks found in the classrooms. This room is used as a study hall by all high school pupils when not in class.



The library is a room approximately 20 feet square, located across the corridor from the auditorium. This room contains 3,625 uncatalogued books, many of which are almost worn out. Many more are so antiquated that they are no longer used in connection with high school work. The following 21 books were found whose titles appear on the selected list:

- Best, Mrs. Allena, *Winged Girls of Knossos*  
Carlton, F. T., *History and Problems of Organized Labor*  
Cheyney, E. P., *Short History of England*  
Cooper, J. F., *Deerslayer*  
Davis, W. S., *Day in Old Athens*  
Dickens, Charles, *David Copperfield*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Hawthorne, Hildegard, *Romantic Rebel, the Story of Nathaniel Hawthorne*  
Hill, H. C., *Community and Vocational Civics*  
Johnson, Allen, *Union and Democracy*  
Kipling, Rudyard, *Captains Courageous*  
Lytton, E. G., *Last Days of Pompeii*  
Mackail, J. W., *Latin Literature*  
Packard, L. O., and Sinnott, C. P., *Nations as Neighbors*  
Paxson, F. L., *New Nation*  
Pupin, M. I., *From Immigrant to Inventor*  
Riis, J. A., *Making of an American*  
Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
Ross, E. A., *Civic Sociology*  
Sadtler, S. S., *Chemistry of Familiar Things*  
Taussig, F. W., *Tariff History of the United States*

The only magazine which comes regularly to the school is *The Literary Digest*, although copies of a few other publications are often donated to the school.

The office of the superintendent contains a waiting-room, a general office, and a private office. A new safe for the records has just been purchased. The office of the principal is a room about eight feet by twenty feet on the third floor.

The superintendent, the principal, and three of the other teachers have the degree of Master of Arts. The principal teaches three classes in occupations and one in solid geometry. The teacher in charge of the library teaches six English classes

daily and is in charge of the study hall during one 40-minute period. Salaries range from \$1,200 to \$2,640 for teachers. The principal receives \$1,800 a year, and the superintendent, \$3,900.

Thirty-four units of high school work are offered in the following subjects:

- Elementary Algebra
- Advanced Algebra
- Plane Geometry
- Solid Geometry
- Trigonometry
- English
- Journalism
- Public Speaking
- Latin
- Occupations
- World History
- American History
- American Problems
- Social Science
- General Science
- Physics
- Typewriting
- Bookkeeping
- Stenography
- Business Arithmetic
- Commercial Geography
- Commercial Law
- Business Science
- Office Practice
- Shop
- Home Economics
- Agriculture
- Psychology

During the past five years the following courses have been added to the program of studies: advanced algebra, trigonometry, solid geometry, office practice, business science, occupations, psychology, journalism. During this time no subjects have been dropped.

In addition to these courses in which credit toward high school graduation is granted, the following extra-curricular activities are available to pupils:

Future Farmers of America  
Science Club  
Spanish Club  
Geography Club  
Home Economics Club  
Commerce Club  
Dramatic Art Club  
Singing Club  
Junior High School Chorus  
Athletic Association  
Seventh Grade Boys' Athletic Letter Club  
Freshmen Girls' Athletic Club  
Rifle Club  
Aviation Club  
Ace of Clubs  
Recreation Club  
Sub-Deb Club  
Hi-Y Club  
Girl Reserves

The annual commencement exercises consist chiefly of an address by some one not connected with the school.

Some remedial health work is done for pupils. The county nurse and the county physician, with the aid of other local physicians, conduct annual physical examinations of all pupils. Although no record had been kept of remedial work done, 664 physical defects were found in pupils during the current year, according to the records of the school. Parents are advised of such remedial work as is found to be needed. In some instances milk for underweight pupils and glasses for those with defective vision have been provided. Such expense as is involved is borne by the local Rotary Club, Kiwanis Club, and similar organizations.

One of the teachers is designated as director of guidance, or school counselor, another as dean of boys, and a third as dean of girls. The dean of boys and the dean of girls are full-time teachers. The director of guidance teaches shop work half of the time each day and then devotes the remainder of the school day to conferences with pupils and teachers and to the supervision of the guidance program.

Records for each pupil include such items as chronological

age, educational age, intelligence quotient, teachers' estimate of scholastic achievement, pupil's rank in intelligence as compared with that of other pupils in school, pupil's rank in scholastic achievement as compared with that of other pupils in school, and pupil's grade status. Using these data concerning each pupil, the members of the high school faculty divide pupils into three groups: those believed to have high ability, those believed to have average ability, and those believed to have low ability. A new marking system has just been installed. Pupils are rated on each of the following points: working manner, cooperativeness, independence, sociability, and scholastic achievement. In achievement only marks of "unsatisfactory" or "satisfactory" are given. Pupils in different ability groups must reach different standards in order to get satisfactory marks. With the exception of achievement each of the items on which pupils are rated is divided into three degrees. For example, at the top of the scale under "working manner" is listed "(1) Carefully thinks out what is to be done; decides on plans and procedures; and works accordingly." At the middle of this scale comes "(2) Follows directions and exercises some initiative." And at the bottom of the scale is "(3) Thoughtless—makes no plans—goes at things in a 'hit or miss' fashion." Pupils are rated in each of these qualities according to the combined judgment of the members of the high school faculty.

The counselor after securing such information as is available concerning each pupil holds a conference with everyone who receives an "unsatisfactory" mark. He reports that many of these pupils formerly content with a minimum passing mark, which they could get with little difficulty, now show achievement more nearly commensurate with their ability.

The commercial teacher has just completed a community survey. This investigation includes (1) a list of what is said to be nearly all the occupations of the community, (2) the courses which business men of the town believe the high school should offer, and (3) a follow-up record of the graduates of this high school.

As early in his high school career as possible each pupil is required to fill out an application for a high school diploma.

This application contains a list of all the courses which the pupil expects to study before graduation from high school and the order in which he expects to enroll in them. The application must be signed by the pupil, a faculty member designated as his adviser, one of his parents, and finally the principal. Another similar form must be filled out and signed if the pupil later decides to change his original program.

Last year a code of conduct for high school pupils was formulated by members of the student body under the supervision of the principal.

Another feature of the guidance program is a series of lectures by all the members of the high school faculty. Every teacher addresses each one of the six high school grades and by prearrangement lectures on a subject not selected by the other teachers. As an additional part of the guidance program, a more extensive permanent record card than the one now used has just been designed.

According to the statement of the principal, the purpose of this high school is "to develop in the pupil a well-integrated personality."

In this school textbooks are furnished pupils in the seventh and eighth grades. Pupils in the four upper grades furnish all their textbooks and other supplies. There are no fees or dues for any class work or other required activity. An activity ticket admitting pupils to all extra-curricular activities having charges sells for \$2.80, payable at the rate of ten cents a week. In addition, each member of the graduating class is expected to purchase a class ring for \$6.00 to \$9.00, buy invitations to the commencement exercises at ten cents each, and rent a cap and gown to be worn during the commencement exercises. The instructional cost per pupil enrolled in this school is \$46.03 for the current year.

In the letter from the State Department of Education to the secretary of the Board of Education following this year's annual visit to School 448 by a representative of that department, the following comment is made:

"Our only suggestion is that you expand your music and physical education work to round out your school program."

**School 468**

School 468 is located in a town of about 10,000 population. This town is a suburb of a city of several hundred thousand. Among the environmental resources of that city are a large public library, many large churches, several museums, an art gallery, a large botanical garden, a municipal zoo, numerous parks, golf courses, swimming pools, theatres, a symphony orchestra, an opera, a number of radio broadcasting stations, two universities, a number of colleges, several hospitals, a large municipal airport, and numerous factories and other industries.

The main part of the school building was constructed in 1916, although additions were made in 1929 and in 1931. According to the school record, the total cost of the high school building was \$177,549. The grounds immediately surrounding the building are planted in grass and shrubbery. A baseball diamond and three concrete tennis courts are located on the school property. At a distance of about four blocks is the athletic field of 24 acres. This field, which is valued at \$24,000, according to the school records, has been especially equipped for football games and track meets. The school building scored 217 points out of a possible 284 on the checking list of building specifications.

Most of the classrooms meet specifications in all of the items considered. They contain bulletin boards, maps, charts, large library tables, and movable chairs. One laboratory is provided for general science, one for chemistry, and one for physics and biology. A lecture room is located between the biology laboratory and the chemistry laboratory. All laboratories are especially equipped for classroom experimentation in science. According to the school records, the value of the equipment provided for science classes is \$4,000. One of the rooms used for commercial classes contains 24 typewriters; another room contains tables for bookkeeping. The household arts department consists of three rooms fitted with most of the equipment ordinarily used in cooking, sewing, and similar household work. The room used by art classes contains running water, a number of pictures, and desks fitted with adjustable drawing boards.

Music classes meet in rooms especially treated to improve their acoustical properties.

The gymnasium is large enough to contain two basketball courts of regulation size. A part of the gymnasium floor forms the stage of the auditorium. The auditorium seats approximately 1,000 people. Dressing rooms containing lockers and showers are provided near the gymnasium and auditorium for both boys and girls.

The library, which seats approximately 90 pupils at one time, is under the supervision of a full-time librarian. All of the books in the library are on shelves to which the pupils have access. Books are indexed with Library of Congress cards. Of the 4,873 volumes, the following 55 were found whose titles appear on the selected list:

- Austen, Jane, *Pride and Prejudice*  
Barstow, C. L., *Famous Sculpture*  
Bennett, Arnold, *How to Live on 24 Hours a Day*  
Bernays, E. L., *Outline of Careers*  
Blackmore, R. D., *Lorna Doone*  
Bullen, F. T., *Cruise of the Cachalot, Round the World after Sperm Whales*  
Carlton, F. T., *History and Problems of Organized Labor*  
Clark, B. H., and Lieber, Maxim, *Great Short Stories of the World*  
Cooper, J. F., *Deerslayer*  
Darwin, C. R., *Naturalist's Voyage Round the World in H. M. S. "Beagle"*  
Davis, W. S., *Day in Old Athens*  
Davis, W. S., *Life on a Mediaeval Barony*  
Dickens, Charles, *David Copperfield*  
Donham, S. A., *Marketing and House Work Manual*  
Doyle, A. C., *Adventures of Sherlock Holmes*  
Edmund, Peggy, and Williams, H. W., *Toaster's Handbook*  
Eliot, George, *Mill on the Floss*  
Farmer, F. M., *Boston Cooking-School Cook Book*  
Fletcher, B. F., *History of Architecture on the Comparative Method, for Students, Craftsmen, and Amateurs*  
French, T. E., *Manual of Engineering Drawing for Students and Draftsmen*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Goldsmith, Oliver, *Vicar of Wakefield*

- Gowen, H. H., *Asia; a Short History from the Earliest Times to the Present Day*  
 Grenfel, W. T., *Adrift on an Ice-pan*  
 Hall, Jennie, *Buried Cities*  
 Hart, A. B., *American History Told by Contemporaries*  
 Haworth, P. L., *United States in Our Own Times, 1865-1931*  
 Hill, H. C., *Community and Vocational Civics*  
 Hinchman, W. S., and Gummere, F. B., *Lives of Great English Writers from Chaucer to Browning*  
 Hough, Emerson, *Story of the Cowboy*  
 Huntington, Ellsworth, *Asia, a Geography Reader*  
 Kunitz, S. J., *Authors Today and Yesterday*  
 Laut, A. C., *Pathfinders of the West*  
 Lytton, E. G., *Last Days of Pompeii*  
 Magruder, F. A., *National Governments and International Relations*  
 Milton, John, *Complete Poetical Works*  
 Noyes, William, *Handwork in Wood*  
 Potter, P. B., and West, R. L., *International Civics*  
 Repplier, Agnes, *Pere Marquette, Priest, Pioneer and Adventurer*  
 Riis, J. A., *Making of an American*  
 Robinson, J. H., *Medieval and Modern Times*  
 Rogers, J. E., *Tree Book*  
 Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
 Ross, E. A., *Civic Sociology*  
 Rugg, H. O., *History of American Government and Culture*  
 Salomon, J. H., *Book of Indian Crafts and Indian Lore*  
 Sears, M. E., *List of Subject Headings for Small Libraries*  
 Slosson, E. E., *Creative Chemistry*  
 Untermeyer, Louis, *American Poetry Since 1900*  
 Untermeyer, Louis, *Yesterday and Today*  
 Van Doren, Mark, *Anthology of World Poetry*  
 Washington, B. T., *Up from Slavery*  
 Webster, Hutton, *Readings in Medieval and Modern History*  
 White, S. E., *Daniel Boone, Wilderness Scout*  
 Zangwill, Israel, *Melting-pot*

The following 35 magazines come regularly to the school library:

*American Boy*  
*American Girl*  
*American Home*



*American Magazine of Art*  
*Booklist*  
*Business Education World*  
*Current History*  
*Design*  
*Forum*  
*Golden Book Magazine*  
*Good Housekeeping*  
*Gregg Writer*  
*Hygeia*  
*Journal of Geography*  
*La Vie*  
*Le Français*  
*Le Petit Journal*  
*L'Illustration*  
*Literary Digest*  
*Mercure de France*  
*Nation*  
*National Geographic Magazine*  
*Nature Magazine*  
*New Outlook*  
*New Republic*  
*Popular Mechanics Magazine*  
*Popular Science Monthly*  
*Reader's Digest*  
*Review of Reviews*  
*Scribner's Magazine*  
*Survey Graphic*  
*Survey Mid-Monthly*  
*Time*  
*Travel*  
*Vogue*

In this school building a cafeteria is provided for the use of pupils and teachers. Office quarters include a waiting-room, the secretary's office, a storeroom containing a safe, and the principal's private office. The boys' and girls' athletic directors each has an office.

In this school the principal and 11 of the teachers have the degree of Master of Arts. With one exception the teachers have attended one or more universities. The one exception is a teacher of industrial subjects who has attended three technical schools of collegiate rank. Teachers' salaries range from

\$1,674 to \$2,850. The principal receives \$4,000 a year. Teachers who in the principal's opinion have heavy teaching schedules are provided with clerical assistance.

This school offers 47 units of high school work in the following subjects:

- General Mathematics
- Elementary Algebra
- Advanced Algebra
- Plane Geometry
- Solid Geometry
- Trigonometry
- English
- Latin
- French
- Spanish
- Vocations
- Community Civics
- Geography
- Early European History
- Modern History
- American History
- Economics
- Sociology
- Civics and Government
- General Science
- Biology
- Physics
- Chemistry
- Typewriting
- Bookkeeping
- Stenography
- General Business
- General Shop
- Advanced Shop
- Beginning Mechanical Drawing
- Advanced Mechanical Drawing
- Clothing
- Foods
- Orchestra
- Band
- Chorus
- Art Appreciation
- Advanced Art

During the last five years the following courses have been added to the program of studies: French (third year), civics and government, shop (third year). During this time the following courses have been dropped: public speaking, dramatics, zoology.

In School 468 pupils are expected to spend the greater part of each class room period in reading, writing, giving reports, hearing lectures, or doing laboratory experiments and projects. A definite amount of work is assigned pupils in each class. In order to get a superior mark a pupil must do extra work beyond the required assignment. In addition to the classroom work most classes take field trips. For example, classes in history and in art hear lectures at the art museum. Classes in trigonometry do elementary surveying. Classes in manual arts and in science visit local industrial establishments. The bus provided for the transportation of pupils taking such trips is kept fully scheduled a week in advance, according to the principal's statement.

In addition to the courses in which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

- French Club
- Latin Club
- Radio Club
- National Honor Society
- "Top Ten"
- Scribblers' Club
- Debating Club
- Dramatic Guild
- High School Newspaper
- Girls' Glee Club
- Boys' Glee Club
- Orchestra
- Band
- "A" Football
- "B" Football
- "C" Football
- "A" Basketball
- "B" Basketball
- "C" Basketball

Junior Track  
Senior Track  
Girls' Baseball  
Girls' Basketball  
Girls' Volleyball  
Riding Club  
Athletic Letter Club  
Peppers  
Chess Club

The school has three football squads of twenty-five boys each, one basketball squad of fifteen, and two basketball squads of ten boys each. Each squad has a schedule of interscholastic contests of its own. Commencement exercises last year consisted chiefly of an address by a university professor.

The school shares with the elementary school a full-time nurse and a half-time physician. The physician and the nurse give physical examinations once a year to pupils who participate in athletics. Vaccination for smallpox is required of all pupils. During the current year 45 cases of defective vision were discovered among pupils. The school provided glasses for one of these pupils. Certain pupils considered physically abnormal are given special corrective exercises in physical education classes.

The school employs a dean of women and a school psychologist. All pupils are given group intelligence tests. In certain cases individual intelligence tests are given under the direction of the school psychologist. For purposes of guidance pupils are divided into groups, 20 or 30 pupils each, called "advisory groups." The principal considers the purpose of his guidance program to "provide a motive for the pupil now and preparation for future action."

In this school each pupil furnishes all his textbooks and other supplies. Pupils do not pay fees or dues for any class work or other required activity. According to the principal's estimate, the average pupil spends about \$3.50 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class ring for \$4.75. Twelve invitations to the commencement exercises are furnished each pupil free of charge. The school also pro-

vides caps and gowns to be worn by the graduates during the commencement exercises. The cost of instruction per pupil enrolled is \$106.58 for the current year.

In the letter from the State Department of Education following this year's annual supervisory visit to School 468 by a representative of that department, no recommendations for improvement were made.

### Summary

The towns in which the schools enroll between 300 and 500 range in population from approximately 5,000 to 10,000. All of the communities in which these schools are located have a number of important industries. All of these communities have a number of educational and recreational facilities in addition to those furnished by the schools. Schools 356 and 448 have few playground facilities. School 468 has an athletic field consisting of 24 acres. All of the schools have gymnasiums and auditoriums. The gymnasiums and auditoriums of Schools 356 and 468 meet most of the approved standards. The libraries in Schools 448 and 468 are limited in the total number of volumes, in the number of approved titles, and in the number of magazines. The library in School 468 meets most of the generally approved standards. The superintendents and principals in these schools all have the degree of Master of Arts, all the teachers have at least bachelor's degrees, and a number of them have the degree of Master of Arts. Salaries of teachers range from \$1,072 to \$2,850. The number of units of high school work offered ranges from 29 to 47. Some remedial health work is done in each of these schools. Schools 356 and 468 have limited guidance programs as compared with that of School 448. In School 448 textbooks for seventh and eighth grade pupils are furnished by the school. With this exception pupils in these schools furnish all textbooks and other instructional supplies. There are no fees for class work or other required activities. The estimated expenditure per pupil for participation in extra-curricular activities is from \$2.80 to \$3.50 a year. Participation in the various exercises connected with graduation costs members of the graduating class from \$5.50 to \$8.50 each.

The annual cost of instruction per pupil enrolled ranges from \$40.46 to \$106.58 for the current year. In the letters written during the current year by the State Department of Education following its annual inspection of these schools there were few recommendations for improvement.

## CHAPTER VII

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FROM 600 TO 1,000 PUPILS

#### School 610

School 610 is located in a town of approximately 15,000 people. This town contains a public library, two girls' colleges, a university, two hospitals, an airport, two daily newspapers, and a radio broadcasting station. There are also a number of service clubs and women's clubs.

The high school building, which was constructed in 1927 at a cost of \$415,000, houses the pupils in the tenth, eleventh, and twelfth grades. Another building at a distance of several blocks is provided for the seventh, eighth, and ninth grades of the junior high school. The grounds surrounding the senior high school building consist of 40 acres with special provisions for such games as football, baseball, hockey, and tennis. The building, which scored 202 points out of 284 on the checking list of building specifications, is ventilated and partially heated with warm air which is circulated by mechanical means. Steam heat is furnished in addition. Classrooms meet specifications in almost all the items considered. They are provided with bulletin boards, blackboards, supply cabinets, bookcases, and wardrobe space for the use of teachers.

For experimental and demonstration work the physics and biology laboratories are provided with equipment estimated to be worth \$1,500. Three rooms used for classes in typewriting, stenography, and bookkeeping have equipment estimated to be worth \$2,500. The home economics department is housed in a suite of rooms containing such equipment as is ordinarily used in sewing, in cooking, and in serving meals. The industrial arts shops have work-benches, drawing boards, and such equipment as is considered necessary in wood work. A combined music and art room contains musical instruments and exhibits of pupils' work.

By means of a movable partition the gymnasium is separated from the stage of the auditorium in such a way as to utilize the seating space of the auditorium during athletic contests in the gymnasium. The gymnasium is especially designed for basketball and other group games.

The library contains seats for 60 pupils and is connected with two study rooms and an office for the librarian. Several pupil-assistants and one full-time librarian are employed. All the books in the library are on shelves to which the pupils have access. Books are indexed with Library of Congress cards. Of the 4,000 volumes in the library the following 50 were found whose titles appear on the selected list:

Ashmun, M. E., *Modern Prose and Poetry for Secondary Schools*

Austen, Jane, *Pride and Prejudice*

Bennett, Arnold, *How to Live on 24 Hours a Day*

Blackmore, R. D., *Lorna Doone*

Boy Scouts of America, *Official Handbook for Boys*

Broadhurst, Jean, *Home and Community Hygiene*

Carpenter, H. A., and Wood, G. C., *Our Environment*

Clemens, S. L., *Life on the Mississippi*

Cody, Sherwin, *Selections from the World's Greatest Short Stories*

Comstock, J. H., *Insect Life*

Cooper, J. F., *Deerslayer*

Darwin, C. R., *Naturalist's Voyage Round the World in H. M. S. "Beagle"*

Davis, W. S., *Day in Old Athens*

Dickens, Charles, *David Copperfield*

Doyle, A. C., *Adventures of Sherlock Holmes*

Dyer, Elizabeth, *Textile Fabrics*

Eliot, George, *Mill on the Floss*

Farmer, F. M., *Boston Cooking-School Cook Book*

Gayley, C. M., *Classic Myths in English Literature and in Art*

Goldsmith, Oliver, *Vicar of Wakefield*

Gray, Greta, *House and Home*

Grenfel, W. T., *Adrift on an Ice-pan*

Hemon, Louis, *Maria Chapdelaine*

Hinchman, W. S., and Gummere, F. B., *Lives of Great English Writers from Chaucer to Browning*

Hough, Emerson, *Story of the Cowboy*



- Keeler, H. L., *Our Native Trees and How to Identify Them*  
Kipling, Rudyard, *Captains Courageous*  
Kitson, H. D., *How to Find the Right Vocation*  
Lewis, H. R., *Productive Poultry Husbandry*  
Lytton, E. G., *Last Days of Pompeii*  
Mackail, J. W., *Latin Literature*  
Magruder, F. A., *National Governments and International Relations*  
Manly, J. M., and Rickert, Edith, *Contemporary American Literature*  
Mikels, R. M. R., *Short Stories for English Courses*  
Milton, John, *Complete Poetical Works*  
Overton, J. M., *Life of Robert L. Stevenson for Boys and Girls*  
Palmer, G. H., *Life of Alice Freeman Palmer*  
Pupin, M. I., *From Immigrant to Inventor*  
Riis, J. A., *Making of an American*  
Rugg, H. O., *History of American Government and Culture*  
Slosson, E. E., *Creative Chemistry*  
Standard Dictionary, *Funk and Wagnalls New Standard Dictionary of the English Language*  
Taussig, F. W., *Tariff History of the United States*  
Towne, E. T., *Social Problems*  
Trilling, M. B., and Williams, F. M., *Girl and Her Home*  
Turner, F. J., *Frontier in American History*  
Ward, G. O., *Practical Use of Books and Libraries*  
Washington, B. T., *Up from Slavery*  
Weeks, Raymond, *Boys' Own Arithmetic*  
Zangwill, Israel, *Melting-pot*

The following 23 magazines come regularly to the high school library :

- American Boy*  
*American Girl*  
*American Home*  
*American Magazine*  
*American Observer*  
*Boys' Life*  
*Collier's*  
*Current Digest*  
*Current History*  
*Field and Stream*  
*Good Housekeeping*  
*Harper's Monthly Magazine*  
*House and Garden*

*Hygeia**Life**Parents' Magazine**Photoplay Magazine**Popular Mechanics Magazine**Popular Science Monthly**Reader's Digest**Scribner's Magazine**Survey**Time*

The principal's office suite includes a waiting room, a general office, and a private office in which there is a vault. The office quarters of the superintendent are similar but have additional space provided for clerical assistants.

The superintendent of this school has the degree of Doctor of Philosophy from the University of Missouri. The principal and ten of the teachers have the degree of Master of Arts. Salaries of teachers range from \$1,035 to \$1,498. The superintendent receives \$3,600; the principal, \$2,000.

This school offers 35 units of high school work in the following subjects:

Elementary Algebra

Advanced Algebra

Plane Geometry

Solid Geometry

Trigonometry

Advanced Arithmetic

English

Journalism

Public Speaking

Debating

Latin

French

German

Occupations

World History

American History

Economics

Sociology

American Government

Missouri History

Biology  
Physics  
Typewriting  
Bookkeeping  
Shorthand  
Commercial Law  
Salesmanship  
Wood Work  
Mechanical Drawing  
Vocational Home Economics  
Music  
Art  
Hygiene

During the last five years the following subjects have been added to the program of study:

Public Speaking  
Debating  
German  
Occupations  
World History  
American Government  
Commercial Law  
Salesmanship  
Vocational Home Economics  
Hygiene

During this time the following courses have been dropped from the program of studies: early European history, modern European history, general home economics.

In addition to the courses in which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

Home Economics Club  
French Club  
Latin Club  
Commercial Club  
Library Club  
Science Club  
Franklin Club (Honorary History)

Quill and Scroll (Honorary Journalism)  
National Honor Society  
Thalian Guild (Dramatic)  
Troupers (Dramatics Club)  
Forensic Club  
High School Newspaper  
Annual  
Glee Club  
Girls' Intramural Baseball  
Girls' Intramural Basketball  
Girls' Intramural Volleyball  
Girls' Intramural Soccer  
Boys' Baseball  
Boys' Basketball  
Boys' Football  
Boys' Track  
Boys' Wrestling  
Tennis  
Golf  
Girl Reserves  
Hi-Y  
Student Council

Commencement exercises last year consisted chiefly of a pageant entitled "The Gateway." Twenty-seven pupils participated in this pageant.

A full-time nurse is provided to share her services with this high school, the junior high school, and the elementary schools. She is employed for eleven months of the year. A full-time physician is also provided for the school system during ten months of the year. The school physician conducts annual physical examinations of all pupils. Through the local dental association a free dental clinic is available to high school pupils every Saturday morning. Smallpox vaccinations are compulsory for all pupils. Immunization against diphtheria is urged. During the current year, according to the statement of the principal, a number of pupils purchased glasses and had dental work done, although no accurate record was available.

This school shares with the junior high school a full-time director of guidance, whose salary is paid in part by the federal government. This officer teaches one class in occupations, holds conferences with pupils and teachers, and plans and

supervises the guidance program of the school. The principal, also designated as dean of girls, and the assistant principal, designated as dean of boys, assist in advisory work. For purposes of guidance pupils are divided into home-room groups which are under the direction of faculty sponsors.

A permanent record card, designed by the superintendent, is provided for each pupil. This record card contains 1,583 items. Examples of these items are grade progress, activity record, physical record, records made on intelligence tests and achievement tests, and record in college or university. A self-analysis record, consisting of eight mimeographed pages, is filled out by each pupil and filed with the director of guidance for use in such counseling as he believes desirable. Some of the major sections of this record are as follows:

Personal Data

My Scholastic Record

My Study Habits

My Relations with Others

My Hobbies or Leisure Time Activities

My Personal Nature

My Work Interests

During the spring pupils select courses to be studied the following year. Before making this selection they study mimeographed bulletins and confer with home-room sponsors, the director of guidance, or the principal.

A faculty committee formulated the following list of "areas" to be covered in the guidance program:

How to Work and Study Effectively

How to Use One's Leisure

How to Choose the Right Vocation

How to Live the Group Life—Citizenship

How to Be a Useful and Happy Member of [610] High School

How to Understand the Essentials of Personal Economics

How to Develop Gracious Ways of Getting Along with People

How to Make and Hold Friends

How to Be Happy in Home Life—Family Relationships

How to Develop Desirable Character Traits  
How to Be More Aesthetic  
How to Live in a World Group  
How to Care for One's Physical Health  
How to Develop Emotional Stability

Each of these major topics was subdivided into from five to fifteen problems. For example, under the topic "How to Choose the Right Vocation" the following problems are listed:

What I should know about myself  
How to secure information about occupations  
How to secure the advantages and disadvantages of a few selected occupations  
Early choices versus later choices  
Personal qualifications for specific occupations  
The parents' part in helping you choose your life work  
Specific steps in choosing an occupation  
An appreciation of all worthy work and workers  
The value of try-out experiences  
Methods of securing a position  
How to succeed on the job  
The relation of occupational choice to family life  
How to choose the college you will attend  
What I should know about the college I will attend

In order to avoid duplication each problem was assigned to a specific grade in the junior high school or in the senior high school. In making this grade placement the list of topics with subdivisions was sent to each of 20 specialists in the field of guidance. Each of these specialists, who were located in various parts of the United States, indicated the grade in which he believed each problem should be introduced to pupils. The judgment of these specialists, according to the statement of the director of guidance, was considered by the faculty committee in making the grade placement of guidance materials.

A series of bulletins has been prepared for the use of the home-room sponsors. Some of these bulletins deal with such subjects as "The Problem of Guidance," "The Problem of the Home-Room," "The Work of the Home-Room Adviser." Another series of bulletins has been prepared for the purpose of assisting home-room sponsors in conducting specific home-room

programs. For example, seven mimeographed pages have been prepared for use with the problem: "Specific Steps in Choosing a Vocation."

In addition to such home-room programs specifically planned by the faculty committee on guidance to cover definite "areas," there are certain home-room periods, known as "creative periods," whose programs are left to the initiative of each home-room group and its sponsor. This type of program includes such activities as debates on current school problems, contests, and special day exercises.

According to the statement of the principal, the purpose of this high school is "to fit pupils to do the best they can as future citizens."

In this school pupils furnish all textbooks except those required in home economics and in typewriting. Pupils enrolled in English classes pay a library fee of 50 cents each. Pupils furnish all supplies except those used in home economics, biology, and physics classes. According to the principal's estimate, the average pupil spends about \$4.50 to \$5.00 a year for participation in voluntary extra-curricular activities. In addition, each member of the graduating class is expected to purchase a class pin for \$2.00 to \$3.00 or a class ring for \$6.00 to \$7.50, buy invitations to the commencement exercises for seven cents each, and pay a rental fee of \$1.75 for a cap and gown to be worn during the commencement exercises. The cost of instruction in this school per pupil enrolled is \$48.49 for the current school year.

In the letter to the secretary of the Board of Education from the State Department of Education following this year's annual supervisory visit by a representative of that department, no recommendations for the improvement of the high school were made.

### School 665

School 665 is in a town of about 8,000 population located in a farming community. The town has a public library, a park, two golf courses, a swimming pool, two moving picture theatres, a municipal band, a business college, twenty-two churches, two

hospitals, one newspaper published daily, another published three times a week, a furniture factory, and a glove factory. There are Boy Scouts and Girl Scouts organizations, a 4-H Club, a Rotary Club, a Kiwanis Club, several women's clubs, and a parent-teacher association.

The high school building was constructed in 1924 at a cost of \$300,000. This building houses the pupils in the first, second, and third grades, as well as those in the junior-senior high school. The grounds, approximately four acres, are provided with a football field, an oval cinder-covered track, and two tennis courts. The building scored 165 out of a possible 284 points on the checking list of building specifications. The building is ventilated and partially heated by warm air which is mechanically circulated throughout. Steam heat is also provided.

The chemistry laboratory is equipped with laboratory tables, each of which is provided with gas, running water, and lockers for storing apparatus. The physics laboratory contains laboratory tables equipped with gas. A lecture room is located between these two laboratories. A classroom with no water, gas, or other special provisions for experimental work is used for classes in biology and general science. The estimated value of the equipment provided for use in experimental work in physics and chemistry classes is \$2,000.

There are two rooms used by commercial classes. One room is equipped with typewriters placed on small tables; the other contains larger tables used for the bookkeeping classes. The household arts department contains nine sewing machines, a number of sewing tables, lockers for pupils' supplies, and screens for dressing. The sewing room is separated by folding doors from the school cafeteria, where meals are served to pupils by the home economics classes at a price of ten cents a meal. The home economics teacher said the menu usually consists of meat, two vegetables, a salad, and rolls. Several hundred books are kept in the household arts library. The shop used by the vocational agriculture classes contains a laboratory table similar to the type used in the chemistry classes, a work-bench, a forge, and some tools.



One room which is used for music classes has seats for the bands and the orchestras and a raised platform for the director. There is an adjoining storeroom for musical equipment. The school owns about \$2,500 worth of band instruments and music. The instructor says he has furnished 21 instruments in addition, as well as about \$1,000 worth of music.

The auditorium, which seats approximately 1,200 people, has a sloping concrete floor, a picture booth, and a stage which forms the gymnasium. The gymnasium is large enough to contain a basketball court of regulation size. Dressing rooms and shower rooms are provided near the gymnasium and auditorium for both boys and girls.

The library connects with two study halls. One study hall is used by the junior high school pupils and the other by pupils in the senior high school grades. The library is catalogued and has a card index to which pupils have access. A reserve list is also provided for their use. A number of recent books are reserved for the teachers. Of the 10,000 books in the library, the following 44 were found whose titles are on the selected list:

- Austen, Jane, *Pride and Prejudice*  
Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
Blackmore, R. D., *Lorna Doone*  
Bullen, F. T., *Cruise of the Cachalot, Round the World after Sperm Whales*  
Byrd, R. E., *Little America*  
Carpenter, H. A., and Wood, G. C., *Our Environment*  
Clemens, S. L., *Life on the Mississippi*  
Cody, Sherwin, *Selections from the World's Greatest Short Stories*  
Cooper, J. F., *Deerslayer*  
Darwin, C. R., *Naturalist's Voyage Round the World in H. M. S. "Beagle"*  
Dickens, Charles, *David Copperfield*  
Donham, S. A., *Marketing and House Work Manual*  
Doyle, A. C., *Adventures of Sherlock Holmes*  
Eliot, George, *Mill on the Floss*  
Elson, H. W., *History of the United States of America*  
Gayley, C. M., *Classic Myths in English Literature and in Art*

- Goldsmith, Oliver, *Vicar of Wakefield*  
 Grenfel, W. T., *Adrift on an Ice-pan*  
 Hall, Jennie, *Buried Cities*  
 Hart, A. B., *American History Told by Contemporaries*  
 Johnson, Allen, *Union and Democracy*  
 Kipling, Rudyard, *Captains Courageous*  
 Lytton, E. G., *Last Days of Pompeii*  
 Magruder, F. A., *National Governments and International Relations*  
 Manly, J. M., and Rickert, Edith, *Contemporary American Literature*  
 Morley, C. D., *Parnassus on Wheels*  
 Packard, L. O., and Sinnott, C. P., *Nations as Neighbors*  
 Palmer, G. H., *Life of Alice Freeman Palmer*  
 Parkman, Francis, *Boys' Parkman*  
 Parkman, M. R., *Heroes of Today*  
 Paxson, F. L., *New Nation*  
*Readers' Guide to Periodical Literature*  
 Rittenhouse, J. B., *Third Book of Modern Verse*  
 Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
 Semple, E. C., *American History and Its Geographic Conditions*  
 Slosson, E. E., *Creative Chemistry*  
 Standard Dictionary, *Funk and Wagnalls New Standard Dictionary of the English Language*  
 Tappan, E. M., *Story of the Roman People*  
 Taussig, F. W., *Tariff History of the United States*  
 Towne, E. T., *Social Problems*  
 Trilling, M. B., and Williams, F. M., *Girl and Her Home*  
 Trilling, M. B., Williams, F. M., and Reeves, G. G., *Girls' Problems in Home Economics*  
 Washington, B. T., *Up from Slavery*  
 Zangwill, Israel, *Melting-pot*

The following 35 magazines come regularly to the library:

- American Boy*  
*American Cookery*  
*American Magazine*  
*American Penman*  
*Better Homes and Gardens*  
*Country Gentleman*  
*Country Home*  
*English Journal*  
*Good Housekeeping*  
*Harper's Bazaar*  
*Harper's Monthly Magazine*

*High School Teacher*  
*Hygeia*  
*Journal of Home Economics*  
*Ladies' Home Journal*  
*Literary Digest*  
*Missouri Farmer*  
*Missouri Ruralist*  
*Nation's Business*  
*National Geographic Magazine*  
*Parents' Magazine*  
*Popular Mechanics Magazine*  
*Practical Home Economics*  
*Radio Land*  
*Reader's Digest*  
*Safety Education*  
*Saturday Evening Post*  
*Scholastic*  
*School Executives Magazine*  
*Scientific American*  
*Scribner's Magazine*  
*Time*  
*Travel*  
*Vogue*  
*Woman's Home Companion*

Nine newspapers also come regularly to the school. The writer was told that the library is supported chiefly by the income from a \$25,000 trust fund, which was donated to the high school for that purpose.

Office quarters consist of a waiting-room, a secretary's office, a storeroom, the principal's office, and the superintendent's private office.

The superintendent and two of the teachers have the degree of Master of Arts. All but one of the teachers have bachelor's degrees. The teacher who has no degree has studied in five universities, including Harvard and Oxford. The librarian has attended college two years. The superintendent was formerly principal of the high school. He has been doing the work of both superintendent and principal since the end of the first semester of this year, when his predecessor resigned to take another position. A number of the more mature teachers do not approve some of the changes the superintendent would

like to make. However, he is planning to install a new marking system, a new record system, and a guidance program. The former superintendent received a yearly salary of \$3,232. The present superintendent receives \$2,335; the teachers, \$1,000 to \$2,105 each.

School 665 offers 38 units of high school work in the following subjects:

- General Mathematics
- Elementary Algebra
- Advanced Algebra
- Plane Geometry
- English
- Public Speaking
- Latin
- Spanish
- Community Civics
- High School Geography
- World History
- American History
- Economics
- Sociology
- General Science
- Biology
- Physics
- Typewriting
- Bookkeeping
- Stenography
- Household Arts
- Agriculture
- Music
- Hygiene

Musical organizations include three bands, an orchestra, and several glee clubs. During the past five years no courses have been added to the program of studies. During this time the course in high school art has been dropped.

In addition to the courses in which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

- Home Economics Club
- Latin Club
- Spanish Club

Future Farmers of America  
Commercial Club  
National Honor Society  
Public Speaking Club  
Better Speech Club  
High School Newspaper  
Annual  
Football  
Basketball  
Track  
Tennis  
Golf  
Boys' Pep Squad  
Girls' Pep Squad  
Stamp Collectors' Club

The commencement exercises last year consisted chiefly of an address by a secretary of the Y. M. C. A. from another city in this state.

A school nurse provided for the elementary school is available to the high school upon request of the superintendent. Free dental examinations for all pupils have been held by the local dentists. In a few cases, according to the superintendent, the parent-teacher association has provided glasses for pupils with defective vision who were financially unable to buy them.

Records concerning pupils consist of the scholastic marks and credits earned.

In this school each pupil enrolled in the seventh and eighth grades is provided with free textbooks. Pupils in the ninth, tenth, eleventh, and twelfth grades must purchase their own texts and other supplies. For the privilege of using a locker each pupil pays from ten cents to twenty-five cents a year. Each pupil enrolled in typewriting pays a fee of fifty cents a year. An activity ticket, which admits a pupil to almost all activities having charges and entitles him to receive the school annual and the newspaper, is sold to pupils for \$3.00, payable in weekly installments of ten cents. In addition, each member of the graduating class is expected to purchase a class pin for \$5.00 or a class ring for \$8.00, buy commencement invitations for five cents each, and pay a rental fee of \$2.00 for the use of a cap and gown to be worn during the commencement exercises. The cost

of instruction per pupil enrolled is \$33.46 for the current year.

In the letter from the State Department of Education to the secretary of the Board of Education following the annual supervisory visit for this year by a representative of that department, no recommendations for improvement were made.

### School 993

School 993 is located in a town of about 12,000, which is a residential suburb of a city of several hundred thousand population. This city contains a public library, museums, an art gallery, many large churches, a well-known botanical garden, a municipal zoo, numerous parks, golf courses, swimming pools, theatres, an opera, a symphony orchestra, radio broadcasting stations, several colleges, two universities, a number of large hospitals, a municipal airport, and numerous industrial plants.

The main part of the high school building was constructed in 1930, although an addition was made in 1933. The total cost of the building, according to the school records, was \$492,240. The grounds surrounding the school building consist of about five or six acres and include a track, a football field, and a stadium. According to the school records, the value of the athletic field and its equipment is \$83,000. The building scored 215 out of a possible 284 points on the checking list of building specifications. The building is ventilated by windows opening above the steam radiators and by vents connected with a system of fans. Temperature is automatically regulated. The building is fire-proof except for furniture and doors.

Classrooms meet specifications in all the items considered. They contain cork bulletin boards, bookcases, cabinets for the storage of supplies and equipment, and space for the display of pupils' work.

Each science teacher is provided with an office and a store-room adjoining the laboratory in which he teaches. The physics department contains an electrical system providing alternating and direct current, which may be connected, through a switch board, to any pupil's desk, to the instructor's desk, to the chemistry laboratory, or to the lecture room. The voltage may be varied as the instructor desires. Most of the science class-

rooms had a number of exhibits of work done by pupils. All science classrooms are fitted with, or at least have access to, a projection lantern and a moving picture projector. According to the school records, the equipment and supplies available for use in chemistry, physics, biology, and general science classes are valued at \$7,998.

The commercial rooms contain typewriters and other equipment valued at \$2,500 excluding tables and desks. The home economics laboratories have equipment valued at \$4,000, and the art rooms contain equipment valued at \$2,000. Music rooms have been especially treated for the improvement of their acoustical properties. The industrial arts laboratory is fitted almost entirely with equipment which the instructor says was built by high school pupils under his supervision. The instructor's office, a desk in the shop, a tool room, an instrument board for electrical work, a microphone for use by the instructor in making announcements or in giving directions were some of the pieces constructed by the pupils. A number of automobile motors to be used in experimental work had been mounted on a permanent foundation. The equipment in this shop is valued at \$10,000, according to the school records, although the instructor says it would cost considerably more if purchased already constructed.

The gymnasium has provisions for basketball, volleyball, indoor baseball, and other indoor games. The dressing rooms for both boys and girls are equipped with lockers, showers, and drying rooms with baskets for clothing. The girls' dressing room contains individual dressing booths and a number of full length mirrors. The gymnasium is also used as an auditorium.

The library, which has seats for 120 pupils, is in charge of a full-time librarian. Of the 5,500 catalogued and indexed volumes in the library, the following 55 were found whose titles appear on the selected list:

Austen, Jane, *Pride and Prejudice*

Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*

Beard, C. A., and Bagley, W. C., *Our Old World Background*

Bernays, E. L., *Outline of Careers*

- Blackmore, R. D., *Lorna Doone*  
 Breasted, J. H., *History of the Ancient Egyptians*  
 Broadhurst, Jean, *Home and Community Hygiene*  
 Bullen, F. T., *Cruise of the Cachalot, Round the World after Sperm Whales*  
 Caffin, C. H., *How to Study Pictures*  
 Carlton, F. T., *History and Problems of Organized Labor*  
 Cheyney, E. P., *Short History of England*  
 Cooper, J. F., *Deerslayer*  
 Dakin, W. S., *Great Rivers of the World*  
 Davis, W. S., *Day in Old Athens*  
 Dickens, Charles, *David Copperfield*  
 Donham, S. A., *Marketing and House Work Manual*  
 Doyle, A. C., *Adventures of Sherlock Holmes*  
 Dyer, Elizabeth, *Textile Fabrics*  
 Eastman, C. A., *Indian Boyhood*  
 Elson, H. W., *History of the United States of America*  
 Farmer, F. M., *Boston Cooking-School Cook Book*  
 French, T. E., *Manual of Engineering Drawing for Students and Draftsmen*  
 Frost, Helen, and Wardlaw, C. D., *Basketball and Indoor Baseball for Women*  
 Grenfel, W. T., *Adrift on an Ice-pan*  
 Harwood, W. S., *New Creations in Plant Life*  
 Hayes, C. J. H., and Moon, P. T., *Ancient and Medieval History*  
 Huntington, Ellsworth, *Asia, a Geography Reader*  
 Jones, T. E., *Track and Field*  
 Keeler, H. L., *Our Native Trees and How to Identify Them*  
 Latane, J. H., *America as a World Power*  
 Laut, A. C., *Pathfinders of the West*  
 Manly, J. M., and Rickert, Edith, *Contemporary American Literature*  
 Mearns, Hughes, *Creative Youth*  
 Mikels, R. M. R., *Short Stories for English Courses*  
 Milton, John, *Complete Poetical Works*  
 Morley, C. D., *Parnassus on Wheels*  
 Ogg, F. A., *National Progress*  
 Packard, L. O., and Sinnott, C. P., *Nations as Neighbors*  
 Pupin, M. I., *From Immigrant to Inventor*  
 Riis, J. A., *Making of an American*  
 Rogers, J. E., *Tree Book*  
 Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
 Semple, E. C., *American History and Its Geographic Conditions*



Shepherd, W. R., *Historical Atlas*  
 Slosson, E. E., *Creative Chemistry*  
 Standard Dictionary, Funk and Wagnalls New Standard  
*Dictionary of the English Language*  
 Stevens, T. W., *Lettering*  
 Taussig, F. W., *Tariff History of the United States*  
 Thom, D. A., *Everyday Problems of the Everyday Child*  
 Thorndike, Lynn, *History of Medieval Europe*  
 Towne, E. T., *Social Problems*  
 Van Doren, Mark, *Anthology of World Poetry*  
 Wallace, C. E., *Commercial Art*  
 Webster, Hutton, *Readings in Medieval and Modern History*  
 Wilkinson, Mrs. M. O., *Contemporary Poetry*

The following 24 magazines come regularly to the high school library :

*Aero Digest*  
*American Boy*  
*American Magazine*  
*Architecture*  
*Atlantic Monthly*  
*Boys' Life*  
*Current History*  
*Design*  
*Forum*  
*Harper's Monthly Magazine*  
*Hygeia*  
*Literary Digest*  
*Machinery*  
*Motor Boating*  
*National Geographic Magazine*  
*Popular Science Monthly*  
*Radio News*  
*Review of Reviews*  
*Scholastic*  
*School Arts Magazine*  
*Science Leaflet*  
*Scientific American*  
*Scribner's Magazine*  
*Theatre Arts Monthly*

A clipping and pamphlet file is kept in the library.

The office quarters of the principal consist of a waiting-room, an office for clerks and the assistant principal, and the principal's

private office. This room is adjacent to the superintendent's office. A larger room is reserved for meetings of the Board of Education.

The principal, superintendent, and ten of the teachers have the degree of Master of Arts. All have bachelor's degrees. Thirty of the teachers have attended one or more universities. Salaries of teachers range from \$1,000 to \$3,000 a year. The principal receives \$3,506; the superintendent, \$4,500.

This school offers 49 units of high school work in the following subjects:

- General Mathematics
- Elementary Algebra
- Advanced Algebra
- Plane Geometry
- Trigonometry
- English
- Public Speaking
- Latin
- French
- German
- Spanish
- Community Civics
- Geography
- Ancient History
- Modern European History
- World History
- American History
- Economics
- Sociology
- General Science
- Biology
- Physics
- Chemistry
- Typewriting
- Bookkeeping
- Stenography
- Commercial Arithmetic
- Commercial Law
- Business English
- Junior Business Training
- Wood Work
- Mechanical Drawing
- Forge and Metal Work

Electrical Work  
Home Economics  
Music (Glee Club, Band, Orchestra)  
Art

The plan of instruction in the industrial arts department is to allow the pupil to depend largely on his own resources in accomplishing a unit of work. Each boy is given a direction sheet for each job required. The boy works with little supervision, according to the instructor, but before he is allowed to proceed with a second piece of work, he must secure the instructor's approval of his first piece. In this class no failing marks and few inferior marks are given, according to the instructor, since only satisfactory work is accepted. The instructor says the offering of this department is to be increased next year. The first year pupils will all do general shop work, which will include drafting, wood work, metal work, and electricity. For more advanced pupils a year's work will be offered in each of these fields. During one period while the writer was in this shop two boys were making a racing body for an automobile; two more were installing an automobile motor in a boat; other members of the class were engaged in similar activities. Every hour, one boy, with an assistant, is in charge of the tool room, while a third acts as foreman of the shop.

During the past five years the following courses have been added to the program of studies: business English, German, advanced algebra, geography. During this time the following courses have been dropped: vocations, advanced civics, commercial geography.

In addition to the courses in which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

Gregettes (Stenography Club)  
Science Club  
Home Economics Club  
National Honor Society  
Debating  
Forensics  
High School Newspaper

Annual  
A Cappella Choir  
Operetta  
Girls' Athletic Association  
Girls' Basketball  
Girls' Playground Baseball  
Hockey  
Football  
Basketball  
Baseball  
Track  
Magic Club  
Girl Reserves  
Hi-Y

According to the principal, approximately 90 per cent of the girls enrolled in the high school participate in intramural athletics. Girls participate in no interscholastic contests. Boys' football and basketball squads are divided into "A," "B," "C," "D," and "Scrub" teams. Each of these teams has a schedule of interscholastic games.

A full-time nurse divides her time between this school and the elementary school. Pupils are given physical examinations by the school physician three times a year. During the past year 398 defects were found in pupils, according to the school records. Recommendations were made for needed treatment, according to the principal, although there is no record of such treatment. In a few cases glasses were furnished to pupils unable to purchase them. In some instances lunches were supplied to needy pupils through local charitable organizations. In girls' physical education classes remedial exercises are given to those pupils who it is believed will profit from the treatment.

Records concerning each pupil include such items as the results of each health examination, the scores on intelligence tests and achievement tests, scholastic marks and credits earned, attendance, extra-curricular activities participated in, and pupil's vocational plans. For each pupil who graduates another record is kept concerning his activities after leaving the high school. For purposes of guidance pupils are divided into home-room groups supervised by faculty sponsors. In the spring pupils formulate their programs for the next year's work. Be-

fore a pupil enrolls he confers with his home-room sponsor, gets written approval of his program from his parents, and finally has his proposed program approved by a faculty enrollment committee. In order to participate in extra-curricular activities a pupil must secure the approval of his parents and of his home-room sponsor. For purposes of instruction pupils are classified in groups according to the faculty's estimate of their ability.

In School 993 pupils are furnished free textbooks. Pupils enrolled in shop courses pay a fee of \$1.50 each semester for materials used. Those enrolled in home economics classes furnish materials used in sewing. All other instructional materials are furnished free to pupils. According to the principal's estimate, the average pupil spends about \$4.00 a year for participation in voluntary extra-curricular activities. In addition each member of the graduating class is expected to purchase a class ring for \$5.00 to \$6.00, buy commencement invitations for approximately ten cents each, and pay a rental fee of seventy-five cents for the use of a cap and gown to be worn during the commencement exercises. The instructional cost per pupil enrolled in this school is \$66.75 for the current school year.

At the time the records were examined no letter had been received from the State Department of Education concerning the annual supervisory visit for this year.

### Summary

The towns in which the schools enroll between 600 and 1,000 pupils range in population from approximately 8,000 to 15,000. Each community has numerous educational and recreational facilities in addition to those provided by the schools. Each school has special playground facilities. Buildings meet most of the approved standards. Science laboratories are provided with certain basic facilities. The laboratories in School 993 have excellent equipment, according to generally accepted standards. The libraries meet most of the approved standards. The administrative head of each of these high schools has the degree of Master of Arts or a higher degree. Most of the teachers have bachelor's degrees. Salaries of teachers range from \$1,000 to \$3,000 a year. The number of units of high school work of-

ferred varies from 35 to 49. A program of extra-curricular activities is offered in each school. Schools 610 and 993 have school physicians. A nurse is available in each school. Schools 610 and 993 have guidance programs. In School 610 pupils are provided with textbooks in some classes. In School 665 all seventh and eighth grade pupils are furnished textbooks by the school. In School 993 all pupils are provided with textbooks in all classes. Fees in these schools vary from 50 cents per pupil enrolled in English classes in School 610 or 50 cents per pupil enrolled in typewriting in School 665 to \$1.50 for materials used in shop work in School 993. The estimated expenditure per pupil for participation in extra-curricular activities is \$3.00 to \$5.00. Participation in the various exercises connected with graduation costs the members of the graduating class from \$7.00 to \$9.00 each. The cost of instruction per pupil enrolled ranges from \$33.46 to \$66.75. The letters from the State Department of Education following this year's annual inspection of these schools contained no recommendations for their improvement.

## CHAPTER VIII

### EDUCATIONAL OPPORTUNITIES IN HIGH SCHOOLS ENROLLING FROM 1,500 TO 3,000 PUPILS

#### School 1,916

School 1,916 is in a town of about 60,000 population. Besides two colleges located here the town has an art museum, a zoo, parks, golf courses, swimming pools, theatres, and several bands and orchestras in addition to those in the school. A college library and a public library are located within a block of the high school. Other environmental facilities are churches, hospitals, street-cars, an airport, two daily newspapers, three weekly newspapers, a radio broadcasting station, several factories, and railroad shops. The organizations of the town include a Y. M. C. A., a Y. W. C. A., Boy Scouts, Girl Scouts, Camp Fire Girls, 4-H Clubs, several service clubs, and women's clubs.

This senior high school building houses the pupils in grades ten, eleven, and twelve. To the original building, constructed in 1893, additions have been made in 1907, in 1913, and in 1918. According to the school records, the total cost of the building was \$210,000. The yard in front of the building contains a number of large trees. There is no playground space. For certain athletic events the pupils use some of the college grounds. Often they use a pasture. The building scored 160 points out of a possible 284 on the checking list of building specifications.

Classrooms meet most specifications in regard to such items as dimensions, heating, ventilation, blackboards, and bookcases. Several rooms, however, do not meet specifications as to illumination. Some of the rooms have no wardrobe space and no bulletin boards.

The biology department has a collection of charts, models, and preserved biological specimens. In one of the laboratories is a 60-gallon aquarium which the biology classes drain and make into the proper habitat for each group of plants or animals

studied. Smaller aquaria and boxes used for experiments in germination are also provided. The biology rooms have skylights in order to improve the illumination. Thirty microscopes, a projection lantern, and several hundred lantern slides are available for use in the biology classes. Each room in this department is provided with six copies of nine recent biology texts. Each pupil pays a rental fee of 25 cents a year for the use of these books. The value of the equipment provided for biology, physics, chemistry, agriculture, and physiography classes was estimated to be \$5,300.

Commercial rooms contain 100 typewriters and other equipment, the total value of which was estimated at \$9,000. The home economics department is equipped with sewing machines, ironing boards, laboratory tables, stoves, and dining tables. The art room is provided with sinks, tables, drawing boards, storage cabinets, and a paper cutter. Numerous examples of pupils' work were on display. The industrial arts shops are located in a separate building near the main building. The estimated value of equipment in these shops is \$8,000.

The gymnasium, constructed in 1930, is another separate building near the main structure. Provisions have been made in this building for such activities as volleyball, basketball, indoor baseball, wrestling, and tumbling. The gymnasium is furnished with an electrical sound amplifier. Dressing rooms with drinking fountains, lockers, and showers are provided. Gymnasium clothing is kept in wire lockers. There are two offices for both boys' and girls' instructors. The training room contains rubbing tables, weight charts, mirrors, cabinets, and telephones.

In the oldest part of the building is the auditorium, which has on three sides a balcony that overlooks the stage. Including the balcony, the auditorium will seat with movable chairs about one-fourth of the student body. All music instruction is given in this room.

The cafeteria, which is located in the basement, is so small that four daily lunch periods are necessary in order to serve all the pupils.

Requisitions, attendance blanks, and similar forms, as well



as the school newspaper, are printed in the school printing shop.

The library, which seats 60 pupils, is adjacent to a study hall seating 120. Pupil-librarians employed for 20 cents an hour assist the full-time librarian. The library contains about 16,000 catalogued and indexed volumes, including the following 74 titles from the selected list:

- Ashmun, M. E., *Modern Prose and Poetry for Secondary Schools*  
Austen, Jane, *Pride and Prejudice*  
Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
Bennett, Arnold, *How to Live on 24 Hours a Day*  
Best, Mrs. Allena, *Winged Girls of Knossos*  
Brown, F. C., *Letters and Lettering*  
Byrd, R. E., *Little America*  
Caffin, C. H., *How to Study Pictures*  
Carlton, F. T., *History and Problems of Organized Labor*  
Chapman, Maristan, *Homeplace*  
Clemens, S. L., *Life on the Mississippi*  
Cody, Sherwin, *Selections from the World's Greatest Short Stories*  
Cooper, J. F., *Deerslayer*  
Darrow, F. L., *New World of Physical Discovery*  
Davis, W. S., *Day in Old Athens*  
Davis, W. S., *Life on a Mediaeval Barony*  
Dickens, Charles, *David Copperfield*  
Doyle, A. C., *Adventures of Sherlock Holmes*  
Eastman, C. A., *Indian Boyhood*  
Edmund, Peggy, and Williams, H. W., *Toaster's Handbook*  
Eliot, George, *Mill on the Floss*  
Elson, H. W., *History of the United States of America*  
Farmer, F. M., *Boston Cooking-School Cook Book*  
Ferris, H. J., *Producing Amateur Entertainments*  
French, T. E., *Manual of Engineering Drawing for Students and Draftsmen*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Goldsmith, Oliver, *Vicar of Wakefield*  
Gowen, H. H., *Asia; a Short History from the Earliest Times to the Present Day*  
Gray, Greta, *House and Home*  
Grenfel, W. T., *Adrift on an Ice-pan*  
Guptill, A. L., *Drawing with Pen and Ink and a Word Concerning the Brush*

- Hart, A. B., *American History Told by Contemporaries*  
 Haughton, P. D., *Football and How to Watch It*  
 Hemon, Louis, *Maria Chapdelaine*  
 Heydrick, B. A., *Familiar Essays of Today*  
 Hornaday, W. T., *American Natural History*  
 Howe, H. E., *Chemistry in the World's Work*  
 Johnsen, J. E., *Child Labor*  
 Kipling, Rudyard, *Captains Courageous*  
 Latane, J. H., *America as a World Power*  
 Lee, W. T., *Stories in Stone*  
 Lester, K. M., *Historic Costume*  
 Lewis, H. R., *Productive Poultry Husbandry*  
 Lytton, E. G., *Last Days of Pompeii*  
 Mackail, J. W., *Latin Literature*  
 Magruder, F. A., *National Governments and International Relations*  
 Mikels, R. M. R., *Short Stories for English Courses*  
 Milton, John, *Complete Poetical Works*  
 Morley, C. D., *Parnassus on Wheels*  
 Nicolay, Helen, *Boys' Life of Washington*  
 Noyes, William, *Handwork in Wood*  
 Ogg, F. A., *National Progress, 1907-1917*  
 Overton, J. M., *Life of Robert L. Stevenson for Boys and Girls*  
 Palmer, G. H., *Life of Alice Freeman Palmer*  
 Polk, R. W., *Essentials of Linoleum-Block Printing*  
 Pupin, M. I., *From Immigrant to Inventor*  
*Readers' Guide to Periodical Literature*  
 Riis, J. A., *Making of an American*  
 Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
 Ross, E. A., *Civic Sociology*  
 Sadtler, S. S., *Chemistry of Familiar Things*  
 Schauffler, R. H., *Christmas*  
 Schauffler, R. H., and Sanford, A. P., *Plays for Our American Holidays*  
 Slosson, E. E., *Creative Chemistry*  
 Standard Dictionary, *Funk and Wagnalls New Standard Dictionary of the English Language*  
 Taussig, F. W., *Tariff History of the United States*  
 Towne, E. T., *Social Problems*  
 Untermeyer, Louis, *American Poetry Since 1900*  
 Untermeyer, Louis, *Yesterday and Today*  
 Van Doren, Mark, *Anthology of World Poetry*  
 Washington, B. T., *Up from Slavery*  
 Weeks, Raymond, *Boys' Own Arithmetic*

Wilkinson, Mrs. M. O., *Contemporary Poetry*  
Zangwill, Israel, *Melting-pot*

The following 66 magazines come regularly to the library :

*American Builder*  
*American City*  
*American Cookery*  
*American Home*  
*American Magazine*  
*American Magazine of Art*  
*American Review*  
*Annals of the American Academy of Political and Social Science*  
*Asia*  
*Athletic Journal*  
*Atlantic Monthly*  
*Better Homes and Gardens*  
*Classical Journal*  
*Congressional Digest*  
*Country Gentleman*  
*Current History*  
*Delineator*  
*English Journal*  
*Forecast*  
*Forum*  
*Good Housekeeping*  
*Harper's Monthly Magazine*  
*Hispania*  
*Home Craft*  
*Hygeia*  
*House and Garden*  
*Industrial Education Magazine*  
*Journal of Geography*  
*Journal of Home Economics*  
*Junior-Senior High School Clearing House*  
*Ladies' Home Journal*  
*Literary Digest*  
*Mathematics Teacher*  
*Missouri Historical Review*  
*Modern Language Journal*  
*Monthly Review of Business Statistics*  
*Musical America*  
*Nation*  
*National Geographic Magazine*

*Nature Magazine*  
*New Outlook*  
*New Republic*  
*Pencil Points*  
*Popular Science Monthly*  
*Radio News*  
*Review of Reviews*  
*School and Society*  
*School Arts Magazine*  
*School Life*  
*School Review*  
*School Science and Mathematics*  
*Science News Letter*  
*Scientific American*  
*Scribner's Magazine*  
*Social Frontier*  
*Social Studies*  
*Stage*  
*Survey*  
*Teachers' College Record*  
*Theatre Arts Monthly*  
*Time*  
*Travel*  
*Vogue*  
*Wallace's Farmer and Iowa Homestead*  
*Wilson Bulletin*  
*Woman's Home Companion*

Subscriptions to several other magazines have been discontinued during the last two years. There are bound volumes of 67 magazines, of which the files in several cases are almost complete for the last 30 years or more. For example, the *Century Magazine* file is complete from 1881 to 1930 with the exception of the volumes for 1903 and 1904. The library also contains bound volumes of the following publications which are no longer taken regularly :

*Arts and Decoration*  
*Bookman*  
*Building Age*  
*Cartoons*  
*Craftsman*  
*Current Literature*  
*Current Opinion*

*Elementary School Journal*  
*Everybody's Magazine*  
*Garden Magazine and Home Builder*  
*General Science Quarterly*  
*House Beautiful*  
*Illustrated World*  
*Independent*  
*Industrial Arts Magazine*  
*International Studio*  
*Keith's Beautiful Home Magazine*  
*Librarian*  
*McClure's Magazine*  
*Manual Training Magazine*  
*Mentor*  
*Monthly Labor Review*  
*Outlook*  
*Popular Radio*  
*Public Libraries*  
*Technical World*  
*World's Work*  
*Yale Review*

Aids in the use of the library include the *Readers' Guide to Periodical Literature*, *Cumulative Book Index*, *Book Review Digest*, *Wilson Bulletin*, and *The Reference Shelf*.

Office quarters for the principal consist of a waiting-room, a general office for clerks, and the principal's private office. The vice-principal's office connects with several rooms which are used in her work as girls' adviser. These rooms serve as conference or rest rooms as needed. Office space is also provided in most of the departments of the school.

The principal has been in School 1,916 for 11 years; the vice-principal, for 46 years. The principal has the degree of Doctor of Philosophy from Yale University. With the exception of three teachers all members of the faculty have bachelor's degrees. Seven have the degree of Master of Arts. The principal's annual salary is \$3,500; teachers' salaries range from \$955 to \$2,833 a year. The average salary for men is \$1,497; that for women, \$1,493.

This school offers 61 units of high school work in the following subjects :

Elementary Algebra  
Intermediate Algebra  
Advanced Algebra  
Plane Geometry  
Solid Geometry  
Trigonometry  
English  
Journalism  
Public Speaking  
Dramatics  
Senior Composition  
Latin  
French  
German  
Spanish  
Ancient History  
Modern European History  
World History  
American History  
Missouri History  
Biology  
Physics  
Chemistry  
Physiology  
Physiography  
Typewriting  
Bookkeeping  
Stenography  
Commercial Arithmetic  
Commercial Law  
Business English  
Salesmanship  
General Business Training  
Wood Work  
Mechanical Drawing  
Forge and Metal Work  
Radio  
Aviation  
Vocational Carpentry  
Boys' Home Economics  
Home Decorations  
Home Relationships

House Arts  
House Science  
Food  
Clothing  
Agriculture  
Chorus  
Glee Club  
Band  
Orchestra  
Harmony  
Art  
Bible

During the past five years the following courses have been added to the program of studies: dramatics, general business training, sheet metal work, boys' home economics. During this time the following courses have been dropped: second year typewriting, printing, hygiene.

In addition to the courses for which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

Art Club  
Home Economics Club  
Inter Nos (Latin Club)  
Spanish Club  
Boys' Industrial Arts Club  
Athenian Literary Society  
Delphian Literary Society  
Girls' Literary Society  
Girls' Literary Society, Junior  
High Literary Society  
Thebian Literary Society  
Zeusisan Literary Society  
Boys' Oratorical Association  
Debating  
Fairbanks Debating Club  
Dramatics Club (Two)  
High School Newspaper  
Annual  
Drum Corps  
Archery Club  
Bicycle Club  
Boys' Athletic Club

Physical Education Leaders' Club

Football

Basketball

Baseball

Track

Tennis

Golf

Girls' Personality Club

Girl Reserves

Hi-Y

House of Representatives

Student Council

Junior Red Cross

Commencement exercises this year will consist chiefly of a pageant commemorating the tercentennial of the American high school. In 1932 the commencement exercises featured a pageant depicting events in the life of George Washington. Approximately 150 pupils participated in this pageant.

There is no health program.

The principal is in charge of the guidance program. A full-time girls' adviser—the vice-principal—and a full-time boys' adviser are employed. Five teachers have been devoting an hour each day to special conferences with individual pupils. For purposes of regular guidance pupils are divided into home-room groups in charge of a faculty sponsor. These groups meet one-half hour every day. On two days of the week several home-room groups meet together in the auditorium for a special program of entertainment, usually presented by pupils. A third day of the week the home-room group spends in discussing current events, a fourth day, in reading and discussing the school newspaper, and the remaining day, in such activities as the group may select.

Special classes are provided for pupils believed to have superior ability. Other classes are organized for pupils of low ability. Pupils whose scholastic marks are below average are not allowed to enroll in courses in algebra, geometry, chemistry, physics, or foreign languages. For pupils considered ineligible for the regular courses in physics and chemistry a simpler course has been arranged. This course, according to the head of the



science department, contains subject-matter related to both physics and chemistry and deals chiefly with scientific problems of a popular nature. Another class, organized for pupils of low ability, combines subject-matter from the fields of English and history.

According to the statement of the principal, the purpose of this high school is "to receive adolescents of this community, to help them live more efficiently now, and to prepare them for adult life."

In School 1,916 pupils furnish all textbooks except those used in biology classes. As previously mentioned, each pupil enrolled in biology pays a fee of 25 cents a year for the use of textbooks. Pupils furnish all supplies except those necessary in cooking classes. An activity ticket costing \$3.00 admits a pupil to most extra-curricular activities having charges. The annual, which costs 75 cents, is an optional additional expense. Each member of the graduating class is expected to purchase a class ring for \$5.00, buy commencement invitations for six cents each, and pay a rental fee of \$1.75 for a cap and gown to be worn during the commencement exercises. The cost of instruction per pupil enrolled is \$50.84 for the current year.

In the letter from the State Department of Education to the secretary of the Board of Education following this year's annual visit to the school by a representative of the State Department of Education, no recommendations were made for the improvement of the high school.

### School 2,078

School 2,078 is located in a city of several hundred thousand population. Among the educational facilities of this city are public libraries, museums, an art gallery, a zoo, parks, golf courses, swimming pools, theatres, a symphony orchestra, an opera, colleges, churches, and hospitals. This city also has airports, a street-car transportation system, river commerce, daily newspapers, radio broadcasting stations, numerous factories and other industrial establishments. Some of the organizations of the city are Y. M. C. A., Y. W. C. A., Boy Scouts, Girl Scouts,

Camp Fire Girls, parent-teacher associations, service clubs, and women's clubs.

The public school system of this city includes a number of elementary schools, junior high schools, senior high schools, and trade schools. School 2,078 is a senior high school enrolling pupils in the tenth, eleventh, and twelfth grades. The original building was constructed in 1914. Additions were made in 1922. According to the school records, the total cost of the building was \$661,100. The grounds, which consist of approximately six acres, contain an athletic field equipped for volleyball, baseball, tennis, track, and football. The building scored 211 points out of a possible 284 on the checking list of building specifications. A school power plant furnishes the electricity needed.

Most of the classrooms meet specifications as to dimensions, heating, ventilation, and illumination. Most of them are equipped with bulletin boards, blackboards, bookcases, and cabinets for supplies.

Laboratories used for biology classes are equipped with gas, running water, charts, aquaria, and specimens of living and preserved animals and plants. The chemistry laboratory contains tables equipped with gas, alternating current, direct current, and running water. Each table is provided with fume-hoods, which are used in certain experiments to avoid contaminating the air of the classroom with unpleasant or dangerous gases. The physics laboratory is equipped with gas, running water, alternating current, and direct current. Numerous parts of automobiles and other machines are provided for the use of pupils in experimental work in physics. All science classes have access to projection lanterns and moving picture machines. Sound pictures are used in some classes. Visual education is directed by a supervisor in the city superintendent's office. School 2,078 has access to any of the films or slides provided for the use of the entire school system. According to the principal, almost every week a new supply of slides or films is received from the central office. The value of the equipment provided for the use of science classes in this school was estimated to be \$16,000.

The equipment in commercial classes was estimated to be worth \$10,000, and that in home economics classes, \$5,000. The art department contains storage cabinets, adjustable drawing desks, posters, pictures, and other equipment, the total value of which was estimated at \$2,500. The music department is provided with a number of pianos, violins, phonographs, and other instruments, the total value of which is approximately \$5,000.

The industrial arts shops are fitted for classes in wood work, sheet metal work, forge work, electrical work, and general shop work. According to the instructor, the chief emphasis here is on fine workmanship rather than preparation for a trade. He says an increasing number of the pupils are constructing home workshops. During the past year, according to the instructor's statement, one of the pupils sold, for about \$3.50 each, more than 100 lamps he had made. Other pupils upholster furniture, construct models of vehicles, or do inlay work. The value of the equipment provided in the industrial arts shops was estimated to be \$25,000.

The school is provided with two gymnasiums equipped for basketball, volleyball, handball, indoor baseball, and other similar games. These gymnasiums have dressing rooms supplied with lockers and showers. Interscholastic basketball games are held in another building used by all the high schools in the city.

The auditorium meets specifications in regard to such items as size, fireproof construction, illumination, ventilation, and acoustical treatment.

A printing shop is available for printing school publications.

A cafeteria is provided for the use of pupils and teachers.

The high school library, which contains 32,000 catalogued and indexed volumes, is a branch of the city public library, which with its branches is under the supervision of the Board of Education. Thus the school has access to several hundred thousand volumes contained in the main public library. In the high school library the following 176 books were found whose titles appear on the selected list:

- Akeley, C. E., *In Brightest Africa*  
Allen, F. J., *Guide to the Study of Occupations*  
Austen, Jane, *Pride and Prejudice*

- Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*
- Barstow, C. L., *Famous Sculpture*
- Bassett, J. S., *Expansion and Reform*
- Beard, C. A., and Bagley, W. C., *Our Old World Background*
- Becker, Mrs. May, *Adventures in Reading*
- Bennett, Arnold, *How to Live on 24 Hours a Day*
- Bernays, E. L., *Outline of Careers*
- Best, Mrs. Allena, *Winged Girls of Knossos*
- Blackmore, R. D., *Lorna Doone*
- Bond, A. R., *With the Men Who Do Things*
- Boy Scouts of America, *Official Handbook for Boys*
- Breasted, J. H., *History of the Ancient Egyptians*
- Brewer, J. M., Hurlbut, Floyd, and Caseman, Juvenilia, *Elements of Business Training*
- Bryce, J. B., *South America; Observations and Impressions*
- Bullen, F. T., *Cruise of the Cachalot, Round the World after Sperm Whales*
- Burd, H. A., and Miller, C. J., *Business Letters; Their Preparation and Use*
- Byrd, R. E., *Little America*
- Caffin, C. H., *How to Study Pictures*
- Carlton, F. T., *History and Problems of Organized Labor*
- Chase, Stuart, and Schlink, F. J., *Your Money's Worth*
- Church, A. J., *Odyssey for Boys and Girls*
- Clarke, B. L., *Marvels of Modern Chemistry*
- Clemens, S. L., *Life on the Mississippi*
- Cody, Sherwin, *Selections from the World's Greatest Short Stories*
- Colum, Padraic, *Golden Fleece and the Heroes Who Lived Before Achilles*
- Comstock, J. H., *Insect Life*
- Cooper, J. F., *Deerslayer*
- Cunliffe, J. W., *English Literature During the Last Half Century*
- Dakin, W. S., *Great Rivers of the World*
- Darrow, F. L., *New World of Physical Discovery*
- Darwin, C. R., *Naturalist's Voyage Round the World in H. M. S. "Beagle"*
- Davis, W. S., *Day in Old Athens*
- Davis, W. S., *Life on a Mediaeval Barony*
- Day, L. F., *Nature and Ornament*
- Delano, J. A., *American Red Cross Text-Book on Home Hygiene and Care of the Sick*
- Dickens, Charles, *David Copperfield*

- Dietz, David, *Story of Science*  
Doyle, A. C., *Adventures of Sherlock Holmes*  
Du Chaillu, P. B., *Land of the Long Night*  
Dyer, Elizabeth, *Textile Fabrics*  
Eastman, C. A., *Indian Boyhood*  
Edmund, Peggy, and Williams, H. W., *Toaster's Handbook*  
Eliot, George, *Mill on the Floss*  
Elson, H. W., *History of the United States of America*  
Engineering Foundation, *Popular Research Narratives*  
Farmer, F. M., *Boston Cooking-School Cook Book*  
Ferris, H. J., *Producing Amateur Entertainments*  
Finck, H. T., *Songs and Song Writers*  
Fisher, Mrs. D. F., *Understood Betsy*  
Fowler, H. W., and Fowler, F. G., *Concise Oxford Dictionary of Current English*  
French, T. E., *Manual of Engineering Drawing for Students and Draftsmen*  
Galpin, C. J., *Rural Life*  
Gayley, C. M., *Classic Myths in English Literature and in Art*  
Georgia, A. E., *Manual of Weeds*  
Goldsmith, Oliver, *Vicar of Wakefield*  
Gowen, H. H., *Asia; a Short History from the Earliest Times to the Present Day*  
Gray, Greta, *House and Home*  
Grenfel, W. T., *Adrift on an Ice-pan*  
Hall, Jennie, *Buried Cities*  
Happold, F. C., *Adventure of Man*  
Hart, A. B., *American History Told by Contemporaries*  
Harwood, W. S., *New Creations in Plant Life*  
Haughton, P. D., *Football and How to Watch It*  
Haworth, P. L., *United States in Our Own Times*  
Hawthorne, Hildegard, *Romantic Rebel, the Story of Nathaniel Hawthorne*  
Hemon, Louis, *Maria Chapdelaine*  
Henry, F. S., *Essentials of Printing*  
Heydrick, B. A., *Familiar Essays of Today*  
Hillyer, V. M., and Huey, E. G., *Child's History of Art*  
Holland, R. S., *Historic Ships*  
Hornaday, W. T., *American Natural History*  
Hough, Emerson, *Story of the Cowboy*  
Hyde, M. P., *Singing Sword*  
Jaffe, Bernard, *Crucibles; the Lives and Achievements of the Great Chemists*  
Jeans, J. H., *Stars in Their Courses*  
Johnsen, J. E., *Child Labor*

- Johnson, Allen, *Union and Democracy*  
 Keeler, H. L., *Our Native Trees and How to Identify Them*  
 Kelly, E. P., *Trumpeter of Krakow*  
 Kipling, Rudyard, *Captains Courageous*  
 Kitson, H. D., *How to Find the Right Vocation*  
 Krasinska, Franciszka, *Journal of Countess Francoise*  
     *Krasinska, Great-grandmother of Victor Emanuel*  
 Kunitz, S. J., *Authors Today and Yesterday*  
 Lagerlof, S. O. L., *Marbacka*  
 Lang, Andrew, *Red True Story Book*  
 Latane, J. H., *America as a World Power*  
 Lee, W. T., *Stories in Stone*  
 Lester, K. M., *Historic Costume*  
 Lewis, H. R., *Productive Poultry Husbandry*  
 Lewisohn, Ludwig, *Expression in America*  
 Lippincott, Isaac, and Tucker, H. R., *Economic and Social*  
     *History of the United States*  
 Long, A. W., *American Patriotic Prose*  
 Loomis, F. B., *Field Book of Common Rocks and Minerals*  
 Lutkenhaus, Mrs. A. M., *Plays for School Children*  
 Lytton, E. G., *Last Days of Pompeii*  
 Mackail, J. W., *Latin Literature*  
 Manly, J. M., and Rickert, Edith, *Contemporary American*  
     *Literature*  
 Marshak, I. I., *Black on White; the Story of Books*  
 Marshall, H. E., *English Literature for Boys and Girls*  
 Mathews, F. S., *Field Book of American Trees and Shrubs*  
 Mearns, Hughes, *Creative Youth*  
 Meister, Morris, *Magnetism and Electricity*  
 Mikels, R. M. R., *Short Stories for English Courses*  
 Milton, John, *Complete Poetical Works*  
 Morgan, A. P., *Boys' Home Book of Science and Construc-*  
     *tion*  
 Morley, C. D., *Parnassus on Wheels*  
 Mukerji, D. G., *Gay-Neck; the Story of a Pigeon*  
 Neillson, W. A., and Thorndike, A. H., *History of English*  
     *Literature*  
 Nicolay, Helen, *Boys' Life of Washington*  
 Noyes, William, *Handwork in Wood*  
 Ogg, F. A., *National Progress, 1907-1917*  
 Olcott, F. J., *Story-Telling Poems*  
 Overton, J. M., *Life of Robert L. Stevenson for Boys and*  
     *Girls*  
 Packard, L. O., Sinnott, C. P., and Overton, Bruce, *Nations*  
     *at Work*  
 Page, V. W., *Modern Gasoline Automobile*

- Palmer, G. H., *Life of Alice Freeman Palmer*  
Parkman, Francis, *Boys' Parkman*  
Parkman, M. R., *Heroes of Today*  
Parsons, Geoffrey, *Stream of History*  
Paxson, F. L., *New Nation*  
Phelps, E. M., *Selected Articles on Evolution*  
Pieper, C. J., and Beauchamp, W. L., *Everyday Problems in Science*  
Polk, R. W., *Essentials of Linoleum-Block Printing*  
Potter, P. B., and West, R. L., *International Civics*  
Pupin, M. I., *From Immigrant to Inventor*  
Quennell, Marjorie, and Quennell, C. H. B., *Everyday Life in Anglo-Saxon, Viking, and Norman Times*  
Quennell, Marjorie, and Quennell, C. H. B., *Everyday Life in Archaic Greece*  
*Readers' Guide to Periodical Literature*  
Repplier, Agnes, *Pere Marquette, Priest, Pioneer and Adventurer*  
Riis, J. A., *Making of an American*  
Rittenhouse, J. B., *Third Book of Modern Verse*  
Rodger, E. G., *Careers*  
Rogers, J. E., *Tree Book*  
Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
Ross, E. A., *Civic Sociology*  
Rourke, C. M., *Davy Crockett*  
Salomon, J. H., *Book of Indian Crafts and Indian Lore*  
Schauffler, R. H., *Christmas*  
Schauffler, R. H., and Sanford, Mrs. A. P., *Plays for Our American Holidays*  
Scoville, Samuel, *Wild Folk*  
Semple, E. C., *American History and Its Geographic Conditions*  
Shepherd, W. R., *Historical Atlas*  
Singmaster, Elsie, *Book of the Colonies*  
Slosson, E. E., *Creative Chemistry*  
Smith, C. F., *Games and Game Leadership*  
Smith, E. S., *Heroines of History and Legend*  
Standard Dictionary, *Funk and Wagnalls New Standard Dictionary of the English Language*  
Stevens, T. W., *Lettering*  
Stevenson, B. E., and Stevenson, Mrs. E. S., *Days and Deeds*  
Stewart, G. H., and Hanna, C. C., *Adventures in Citizenship*  
Taintor, S. A., and Monroe, K. M., *Secretary's Handbook, a Manual of Correct Usage*

Tappan, E. M., *Story of the Roman People*  
 Taussig, F. W., *Tariff History of the United States*  
 Thom, D. A., *Everyday Problems of the Everyday Child*  
 Thomas, L. J., *Boys' Life of Colonel Lawrence*  
 Thorndike, Lynn, *History of Medieval Europe*  
 Towne, E. T., *Social Problems*  
 Turner, F. J., *Frontier in American History*  
 Untermeyer, Louis, *American Poetry Since 1900*  
 Van Doren, Mark, *Anthology of World Poetry*  
 Van Metre, T. W., *Trains, Tracks and Travel*  
 Verrill, A. H., *Gasoline-Engine Book for Boys*  
 Wallace, C. E., *Commercial Art*  
 Ward, G. O., *Practical Use of Books and Libraries*  
 Washington, B. T., *Up from Slavery*  
 Weeks, Raymond, *Boys' Own Arithmetic*  
 Wheeler, C. G., *Woodworking*  
 White, S. E., *Daniel Boone, Wilderness Scout*  
 Wilkinson, Mrs. M. O., *Contemporary Poetry*  
 Williams, B. C., *Our Short Story Writers*  
 Wines, E. M., and Card, M. W., "*Come to Order!*" *Essentials of Parliamentary Practice*  
 Woodworth, R. S., *Psychology; a Study of Mental Life*  
 Zangwill, Israel, *Melting-pot*

The following 64 magazines come regularly to the high school library:

*American Boy*  
*American City*  
*American Girl*  
*American Home*  
*American Magazine*  
*American Review*  
*Atlantic Bookshelf*  
*Atlantic Monthly*  
*Aviation*  
*Booklist*  
*Book Review Digest*  
*Boys' Life*  
*Business Week*  
*Child Life*  
*Congressional Digest*  
*Country Life*  
*Current History*  
*Delineator*



*Design*  
*Drama*  
*Forum*  
*Golden Book Magazine*  
*Good Housekeeping*  
*Harper's Bazaar*  
*Harper's Monthly Magazine*  
*Horn Book*  
*Industrial Arts Magazine*  
*Inland Printer*  
*Journal of Home Economics*  
*Ladies' Home Journal*  
*Library Journal*  
*Literary Digest*  
*Living Age*  
*Missionary Review of the World*  
*Modern Mechanics*  
*Musical America*  
*Musical Courier*  
*Nation*  
*National Geographic Magazine*  
*Nature Magazine*  
*Nation's Business*  
*New Republic*  
*New York Times Book Review*  
*Outlook*  
*Pictorial Review*  
*Popular Mechanics Magazine*  
*Popular Science Monthly*  
*Radio News*  
*Reader's Digest*  
*Review of Reviews*  
*St. Nicholas*  
*Saturday Evening Post*  
*Saturday Review of Literature*  
*School and Society*  
*School Arts Magazine*  
*Scientific American*  
*Scientific Monthly*  
*Scribner's Magazine*  
*Subscription Books Bulletin*  
*Survey*  
*Time*  
*Vogue*  
*Woman's Home Companion*  
*World's Work*

Bound copies of 29 magazines, of which the files in several instances are almost complete for the last 20 years or more, are available. The library also contains bound copies of the following magazines which are no longer taken regularly:

*Bookman*  
*Century Magazine*  
*Current Opinion*  
*Independent*  
*Scientific American Monthly*  
*Scientific American Supplement*

A clipping file is maintained. Instruction in the use of the library is given pupils near the beginning of each school year. Eight full-time librarians and three pupil-librarians are employed.

The office suite of the principal contains a general office, a private office for the principal, and another for the vice-principal. Office space is provided for most of the departments of the school.

The principal has the degree of Master of Arts, as do 20 of the teachers. Forty-four of the teachers have the bachelor's degree. Sixty-one have attended universities. The principal is expecting to teach courses in education at a state university during the coming summer session. He receives a yearly salary of \$4,000. Salaries of teachers range from \$1,280 to \$2,560. The average salary for men is \$2,218; for women, \$2,014.

Sixty-five units of high school work are offered in the following fields:

Elementary Algebra  
Advanced Algebra  
Plane Geometry  
Solid Geometry  
Trigonometry  
English  
Journalism  
Public Speaking  
Dramatics  
Latin  
French

German  
Spanish  
World History  
American History  
Economics  
Sociology  
Physical Geography  
Biology  
Botany  
Zoology  
Physics  
Chemistry  
Physiology  
Typewriting  
Bookkeeping  
Stenography  
Commercial Geography  
Commercial Law  
Business English  
Salesmanship  
Wood Work  
Mechanical Drawing  
Printing  
Forge and Metal Work  
Home Economics  
Chorus  
Glee Club  
Band  
Instrumental Music  
Harmony  
Art  
Military Training  
Psychology

During the past five years the following courses have been added to the program of studies: wood work (third year), printing (third year), metal work. During this time the following courses have been dropped: ancient history, modern history, commercial arithmetic, auto mechanics.

In addition to the courses for which credit toward high school graduation is given, the following extra-curricular activities are available to pupils:

Art Honor Club

French Club

German Club

Science Club

Botany Club

Zoology Club

Literary Societies

Society of Literature and History

Webster Club

Aristonian Literary Club

Minerva Literary Club

Franklin Club

Thalian Literary Society

Delphian Literary Society

Emerson Club

Debate

Plays

Stage Crew

Annual

High School Newspaper

Music Club

Orchestra (Partly Extra-Curricular)

Band ( " " " )

Chorus ( " " " )

Girls' Athletic Club

Boys' Athletic Club

Boys' Athletic Letter Club

R. O. T. C. Officers' Club

Intramural Athletics

Baseball

Basketball

Football

Tennis

Touch Football

Track

Wrestling

Interscholastic Athletics

Basketball

Football

Golf

Tennis

Track

Model Airplane Club

Student Council

Boys' Hi-Y Club

Girls' Hi-Y Club

Mixer Committee

The school has formulated certain regulations concerning the literary societies. These regulations treat such topics as eligibility for membership, "rushing," "pledging," secret meetings, social functions, and the annual literary society contest. Membership in each society is limited to 40 pupils. New members are selected by a vote of the membership in each group. Every year representatives of each society compete with those of the other societies in the following events:

Oration  
Declamation  
Extemporaneous Speech  
Essay  
Original Story  
Original Verse

Individual winners of these events are awarded gold medals. According to the statement of the vice-principal, the student body shows more enthusiasm at these literary intersociety contests than at interscholastic athletic events.

Commencement exercises consist chiefly of an address by someone from outside the school system. According to the principal these exercises have been "standardized for the past 25 years."

A full-time nurse is employed, and for the first three weeks of each school year a school physician is engaged. All pupils are required to enroll in physical education or military classes for at least one year. Annual physical examinations are given by the school physician to all pupils enrolled in these courses. School health records concerning each pupil include such items as date of each inspection, health appearance, condition of eyes, throat, nose, ears, teeth, glands, chest, heart, and skin, as well as weight, posture, speech defects, communicable disease history, results of Schick test, and date of last successful vaccination for smallpox. According to these records, 667 defects have been discovered in pupils during the past year, 237 of which have been at least partially corrected.

The principal and the vice-principal are in charge of the guidance program. A school counselor is employed whose chief

duties are to help coordinate the work of the senior high school with that of the junior high school and to help make adjustments between the school and pupils' homes. One member of the faculty is responsible for settling girls' disciplinary problems.

For purposes of guidance pupils are divided into home-room groups in charge of faculty sponsors. Home-room meetings are held daily for a period of 11 minutes, during which time the attendance is checked, announcements are made, and similar routine matters are attended to. Once every two weeks home-room groups meet for 30 minutes for a program which has been planned in advance by a committee composed of three men teachers, three women teachers, and the vice-principal. The following topics are sample subjects of these programs: "Shall I go to College?" "Motor Accidents in the United States," "Independent Education After High School." These programs are planned in sufficient detail that a home-room sponsor is expected to spend not more than a few minutes in preparation for a home-room meeting. For example, the mimeographed plan for the program entitled "Shall I Go to College?" contains statements made by the following people concerning the advisability of attending or not attending college:

Albert Einstein  
John Dewey  
Walter P. Chrysler  
Helen Hull Jacobs  
Walter N. Palakov  
Charles A. Beard  
Miriam Van Waters  
Norman Thomas  
Harry D. Kitson  
William F. Osborn  
Charles R. Allen  
Logan Clendening

Several intelligence tests are given to all pupils. In some classes pupils are divided into sections on the basis of mental ability as determined by these tests. In certain courses commercial achievement tests are given. According to the state-

ment of the vice-principal one of the greatest needs of the school is "a placement bureau to secure positions for capable high school graduates." He says, "A weakness of this school system is that no provision is made for pupils of low ability." The principal states that the purpose of this high school is "not to prepare for college, since less than 25 per cent of the graduates attend college."

In this school pupils are expected to furnish their own textbooks and supplies. Pupils enrolled in industrial arts courses pay a fee of 25 cents a year. Pupils enrolled in physical education classes pay a yearly fee of 25 cents for the use of towels during the school term. The estimated cost to the average pupil for participation in voluntary extra-curricular activities is \$3.00 a year. Each member of the graduating class is expected to purchase a class ring for \$6.90 or a class pin for \$4.25 and buy commencement invitations for approximately 65 cents. No standardized commencement dress is required of pupils, although 40 girls are making their own dresses at an average cost of \$5.50 each. The instructional cost per pupil enrolled is \$63.82 for the current school year.

The State Department of Education exercises no supervision over this school.

### School 2,812

School 2,812 is located in a city of several hundred thousand population. Among the environmental opportunities which this city affords are an extensive public library system, several daily newspapers, many large churches, several museums, an art gallery, a widely known botanical garden, a large municipal zoo, numerous parks, golf courses, swimming pools, theatres, operas, a symphony orchestra, a number of radio broadcasting stations, several colleges, two universities, large hospitals, a municipal airport of note, a street-car and bus transportation system, numerous factories and other industries typical of a center of railroad and river traffic. Some of the organizations of this city are Y. M. C. A., Y. W. C. A., Boy Scouts, Girl Scouts, Camp Fire Girls, parent-teacher associations, federated women's clubs, and Rotary, Kiwanis, and Lions' Clubs.

The public school system consists of a number of elementary schools, high schools, vocational schools, schools for physically handicapped children, schools for delinquent children, and schools for the training of teachers. School 2,812 is a four-year high school enrolling pupils in grades nine through twelve. The high school building, which overlooks a municipal park, was constructed in 1926 at a cost of \$1,635,959.20, according to the records of the school. The grounds, which consist of approximately eight acres, have provisions for football, baseball, and volleyball. In addition, the school shares a stadium with several other high schools located in this city. The building has automatic temperature control. Ventilation is secured by a system of fans which affect not only classrooms and corridors but also lockers provided for storage of pupils' books, supplies, and clothing. The cleaning of the building is facilitated by means of a vacuum system. Electricity is generated in the school's own power plant. The building scored 209 points out of a possible 284 on the checking list of building specifications.

The classrooms meet specifications in all the items considered. These rooms contain bulletin boards made of cork, bookcases, storage cabinets, glass cases for display purposes, and telephones. The 18 science laboratories are especially equipped for conducting experimental work. A greenhouse about 20 feet by 30 feet is provided for the biology department. Analytical balances are furnished for quantitative experiments in chemistry classes. Direct current for use in general science or physics classes is available from the school power plant. There is apparatus for producing alternating current when needed in these classes. The estimated value of the equipment provided for experimental and demonstration work in various science courses is as follows: biology, \$4,000; chemistry, \$3,600; physics, \$3,400; geography and physiography, \$3,000; general science, \$1,000.

The rooms used for classes in typewriting have been especially treated to reduce noise. The value of the equipment provided for the commercial classes was estimated to be \$6,500. The home economics department contains a housekeeping suite consisting of a kitchen, a dining-room, a living-room, bed-rooms, and a



bath-room. The room used for classes in sewing is furnished with sewing machines and tables. The cooking laboratory contains a lecture gallery, a desk to be used by the teacher in making demonstrations, and facilities for individual cooking by pupils. Certain rooms used by art and drawing classes contain drawing boards, storage cabinets, running water, and numerous pictures. The music rooms have been especially treated to improve their acoustical effects. Each of the five industrial arts shops accommodates from 75 to 90 pupils at a time. In the automobile shop, which will contain 15 automobiles, the pupils do some experimental work with models of automobile parts. Most of the time, however, according to the instructor, the pupils repair actual automobiles which are furnished by the boys themselves, by other pupils in school, or by members of the faculty. The instructor says he inspects each piece of work before an automobile is allowed to leave the shop. The value of equipment provided for use in industrial arts classes is approximately \$12,000.

Each of the four gymnasiums meets specifications for standard gymnasiums for high schools. Each is equipped for such games as basketball, volleyball, handball, and indoor baseball. Some are provided with mats for tumbling and wrestling and with other equipment for gymnastic work. A swimming pool is available for the pupils in physical education classes. All boys are required to enroll in swimming classes as a part of the regular physical education work, while with girls swimming is optional. Dressing rooms containing mirrors, showers, and lockers are available to both boys and girls.

The auditorium, which seats about 1,500, is equipped with a stage large enough to contain a basketball court of regulation size. Curtains for this stage are electrically controlled.

A cafeteria furnishes lunches to pupils and teachers at the rate of five cents a portion.

Projection lanterns, moving picture machines, and the facilities of a city school museum are available to all departments of the school.

The library is in charge of a full-time librarian who is assisted by several pupil-librarians. The library contains about

8,000 catalogued and indexed volumes, of which the following 46 titles appear on the selected list:

- Allen, F. J., *Guide to the Study of Occupations*  
 Austen, Jane, *Pride and Prejudice*  
 Bancroft, J. H., *Games for the Playground, Home, School, and Gymnasium*  
 Blackmore, R. D., *Lorna Doone*  
 Brown, F. C., *Letters and Lettering*  
 Caffin, C. H., *How to Study Pictures*  
 Carlton, F. T., *History and Problems of Organized Labor*  
 Clark, B. H., and Lieber, Maxim, *Great Short Stories of the World*  
 Cody, Sherwin, *Selections from the World's Greatest Short Stories*  
 Cooper, J. F., *Deerslayer*  
 Davis, W. S., *Day in Old Athens*  
 Dickens, Charles, *David Copperfield*  
 Eliot, George, *Mill on the Floss*  
 Elson, H. W., *History of the United States of America*  
 Fletcher, B. F., *History of Architecture on the Comparative Method, for Students, Craftsmen, and Amateurs*  
 French, T. E., *Manual of Engineering Drawing for Students and Draftsmen*  
 Gayley, C. M., *Classic Myths in English Literature and in Art*  
 Goldsmith, Oliver, *Vicar of Wakefield*  
 Grenfel, W. T., *Adrift on an Ice-pan*  
 Hill, H. C., *Community and Vocational Civics*  
 Hinchman, W. S., and Gummere, F. B., *Lives of Great English Writers from Chaucer to Browning*  
 Howe, H. E., *Chemistry in the World's Work*  
 Johnson, Allen, *Union and Democracy*  
 Keeler, H. L., *Our Native Trees and How to Identify Them*  
 Kipling, Rudyard, *Captains Courageous*  
 Lester, K. M., *Historic Costume*  
 Long, A. W., *American Patriotic Prose*  
 Loomis, F. B., *Field Book of Common Rocks and Minerals*  
 Lytton, E. G., *Last Days of Pompeii*  
 Mathews, F. S., *Field Book of American Trees and Shrubs*  
 Milton, John, *Complete Poetical Works*  
 Parkman, Francis, *Boys' Parkman*  
 Paxson, F. L., *New Nation*  
 Pieper, C. J., and Beauchamp, W. L., *Everyday Problems in Science*

- Potter, P. B., and West, R. L., *International Civics*  
Quennell, Marjorie, and Quennell, C. H. B., *Everyday Life in Anglo-Saxon, Viking and Norman Times*  
Quennell, Marjorie, and Quennell, C. H. B., *Everyday Life in Archaic Greece*  
*Readers' Guide to Periodical Literature*  
Riis, J. A., *Making of an American*  
Robinson, J. H., *Medieval and Modern Times*  
Roosevelt, Theodore, *Theodore Roosevelt's Letters to His Children*  
Shepherd, W. R., *Historical Atlas*  
Tappan, E. M., *Story of the Roman People*  
Van Doren, Mark, *Anthology of World Poetry*  
Washington, B. T., *Up from Slavery*  
Webster, Hutton, *Readings in Medieval and Modern History*

The following 24 magazines come regularly to the high school library :

- Atlantic Monthly*  
*Current History*  
*Design*  
*Forum and Century*  
*Geographical Review*  
*Harper's Monthly Magazine*  
*Hygeia*  
*Industrial Arts and Vocational Education*  
*Journal of Geography*  
*Literary Digest*  
*National Geographic Magazine*  
*Nature Magazine*  
*New Outlook*  
*New York Times Book Review*  
*Popular Science Monthly*  
*Radio News*  
*Reader's Digest*  
*Review of Reviews*  
*Scholastic*  
*School Arts Magazine*  
*Scientific American*  
*Scribner's Magazine*  
*Travel*  
*Vogue*

Office quarters are provided for the principal, the assistant principal, and a number of clerks, as well as for most of the departments of the school. A school vault is used to preserve all important papers. Rest rooms are provided for both men and women teachers, and most teachers in the school have free periods which may be spent in these rooms.

Ninety-nine of the teachers have studied in one or more universities. Most of them have attended two or more. Fifteen of the teachers have no degree; eighty-six have bachelor's degrees; forty-one have the degree of Master of Arts; three have the degree of Doctor of Philosophy. Of the 101 teachers 44 are, according to the school records, 50 or more years of age. One woman of 78 is teaching five classes a day. The average salary for women teachers is \$3,060. The average salary for men teachers is \$3,229.53. The principal receives \$5,400 a year. About two years ago all salaries were reduced ten per cent and since that time have not been restored to their former level. The principal said that since salaries had been reduced, most of the teachers were financially unable to attend summer sessions of colleges and universities as they would like to do. He also said that little supervision of instruction was necessary in this school, since "most of the teachers use the same methods they used 40 years ago."

School 2,812 offers 52 units in the following subjects:

- Elementary Algebra
- Intermediate Algebra
- Advanced Algebra
- Plane Geometry
- Solid Geometry
- Trigonometry
- English
- Advanced Composition
- Public Speaking
- Drama
- Latin
- French
- German
- Greek
- Hebrew

Spanish  
Industrial Geography  
History of Missouri  
Early European History  
Later European History  
American History  
Sociology  
Economics  
General Science  
Biology  
Physics  
Chemistry  
Physiography  
Typewriting  
Elementary Bookkeeping  
Advanced Bookkeeping  
Stenography  
Commercial Law  
Wood Work  
Mechanical Drawing  
Auto Mechanics  
Machine Shop  
Household Arts  
Applied Music  
Harmony  
Glee Club  
Advanced Chorus  
Band  
Orchestra  
Drawing  
Art Appreciation  
Art History

Pupils are required to select their courses in accordance with the following curricula, or groups of subjects: classical curriculum, scientific curriculum, general curriculum, commercial curriculum, fine arts curriculum—drawing, fine arts curriculum—music, home economics curriculum, industrial arts curriculum. During the past five years the following courses have been added to the program of studies: industrial geography, early European history, later European history, physiography. During this time the following courses have been dropped: general mathematics, French (fourth year), German (fourth year), Spanish

(fourth year), occupations, world history, civics, business administration, junior business training, salesmanship.

In addition to the courses for which credit toward graduation from high school is given, the following extra-curricular activities are available to pupils:

Biology Club  
French Club  
Mathematics Club  
Nature Club  
Physiography Club  
Radio Club  
Handicraft Club  
Shakespeare Club  
Spanish Club  
La Voz de España  
Typewriting Club (Junior)  
Typewriting Club (Advanced)  
Marionette Club  
Library Club  
Debating  
Semi-Annual Publication  
Bi-Weekly Publication  
Girls' Glee Club  
Boys' Glee Club  
Mixed Chorus  
Operetta  
Band  
Orchestra  
Novelty Orchestra  
Girls' Athletic Association  
Girls' Apparatus Club  
Girls' Gym Club  
Boys' Gym Club  
Girls' Skating Club  
Boys' Skating Club  
Walking Club  
Duck Club  
Ping-Pong Club  
Rifle Club  
Sports Club  
Girls' Basketball  
Boys' Basketball  
Baseball

Football  
Golf  
Tennis  
Track  
Wrestling  
Chess Club  
Service Club  
Stamp and Coin Club

Each day one period of 43 minutes is set aside especially for extra-curricular activities. Certain organizations meet on different days so that each pupil may participate in a number of activities. The operetta and the senior play are the only activities held at night.

Commencement exercises are held at the middle of each school year and again at the end of each year. The exercises preliminary to commencement are distributed over several days. Some of these preliminary exercises are a dance in the gymnasium for members of the graduating class and those of the next class; "color day" in which all girls wear dresses of the class colors; "farewell day;" planting of a tree by the graduating class; and a moving picture showing scenes of various school activities which have been photographed during the last four years. The commencement exercises, held at four o'clock in the afternoon, consist chiefly of musical numbers by members of the graduating class and the presentation of diplomas. The program is followed by a "commencement dinner" for all members of the graduating class.

There are two school physicians, one a man and the other a woman. A school nurse is also employed. Pupils are given physical examinations upon entering the school and are advised of needed medical treatment. Those who participate in athletics are given examinations annually. Vaccination for smallpox is required of all pupils.

For purposes of guidance, pupils are divided into home-room groups which are supervised by faculty sponsors. As far as possible, the principal says, each sponsor is assigned to the same group of pupils from year to year. The nature of the work done by each home-room group is determined by the sponsor of that particular group. Records for each pupil show the

name, address, telephone number, name of parents, occupation of parents, pupil's elementary school record, scores made on intelligence tests, scholastic marks, credits earned, attendance, and extra-curricular activities in which pupil has participated. In addition pupils are rated by their teachers on the following items: reliability, industry, cooperation, leadership, personality, and health. These ratings are made a part of the permanent record for each pupil. Other records include such items as certification to college, honors, and disciplinary problems. The principal says his guidance program is "to fit individuals for life." The purpose of this high school, according to its published bulletin, is "to continue general liberal education for pupils after their graduation from the eighth grade; to furnish opportunity for some degree of special training for those who wish it; and, in addition, to prepare for the college of their choice all who indicate their intention of going to college after graduation from high school."

In this school all textbooks are supplied to pupils free of charge. Most of the supplies used by pupils in connection with their school work are also furnished. No fees or dues are charged for any class work or other required activity. According to the principal's estimate, the average pupil spends about \$1.00 a year for participation in extra-curricular activities other than athletics. A season ticket admitting a pupil to all interscholastic football games during one school year may be purchased for 75 cents. A similar ticket for interscholastic basketball games sells for 50 cents. In addition, members of the graduating class are expected to purchase solid gold class rings or pins for \$6.35 to \$6.95 or gold filled rings or pins for \$3.95. For the commencement exercises this year the girls in the graduating class are to wear uniform dresses costing from \$8.25 to \$8.75 each. Boys in the graduating class wear linen or Palm Beach suits costing approximately \$8.00 to \$9.00 each. In some cases, when pupils are unable to buy clothing considered suitable for wearing during the commencement exercises, the school purchases such clothing for them. The cost of instruction per pupil enrolled for the current year is \$117.00.

The State Department of Education exercises no supervision over this school.



### Summary

The towns in which the selected schools enroll between 1,500 and 3,000 pupils range in population from approximately 60,000 to over 800,000. Each community has many educational and recreational facilities in addition to those furnished by the school. The buildings and grounds of Schools 2,078 and 2,812 meet a large majority of the approved standards. The building of School 1,916 meets most of these standards. Science laboratories and libraries comply with the specifications generally recommended for high schools. The principal of School 1,916 has the degree of Doctor of Philosophy. The principal of School 2,078 has the degree of Master of Arts. All the principals have bachelor's degrees. From seven to forty teachers in each school have the degree of Master of Arts. In School 2,812 three teachers have the degree of Doctor of Philosophy. Salaries of teachers range from \$955 to \$3,600. The number of units of high school work offered ranges from 52 to 65. Programs of extra-curricular activities are offered in each school. School 1,916 has no health program. School 2,078 has a school nurse and, for part of each year, a school physician. School 2,812 employs a school nurse and two physicians. Each school has a guidance program. In Schools 1,916 and 2,078 pupils furnish most of their textbooks. In School 2,812 pupils are provided with textbooks and most of their other instructional supplies without cost to them. No fees greater than 25 cents per pupil are charged in any of these schools. The estimated expenditure per pupil for participation in extra-curricular activities is about \$3.00 in these schools. Participation in the various exercises connected with graduation costs the members of the graduating class from \$6.50 to \$7.00 each plus such clothing as pupils wish to wear for the exercises. The annual cost of instruction per pupil enrolled ranges from \$50.84 to \$117.00. The State Department of Education has no supervision over Schools 2,078 and 2,812, and in the letter following the annual inspection during the current year it made no recommendation for the improvement of School 1,916.

## CHAPTER IX

### SUMMARY, CONCLUSIONS, AND SUGGESTED PROBLEMS FOR FURTHER INVESTIGATION

#### Summary and Conclusions

**Introduction** The purpose of this investigation as stated in the opening chapter was to compare the educational opportunities in small high schools with those in larger ones. The problem was concerned primarily with the environmental facilities for education; the physical plants; the administrative, supervisory, and instructional staffs; the curricular and extra-curricular offerings; and finally, the costs of instruction to the attending pupil and to the supporting community or state. No claim is made that the schools included in this study are typical of all schools of corresponding sizes in the State of Missouri. However, it seems quite likely, as has already been indicated, that the small schools selected for this study are superior to the average Missouri schools of comparable sizes. If these smaller high schools are better than the average high schools of comparable sizes in this state, then any inequalities found are tremendously significant, especially when we remember, as was noted in the first chapter, that three-fourths of all high school districts in the State of Missouri enroll fewer than 106 pupils in grades nine to twelve inclusive and that more than 90 per cent of the high school districts enroll 200 pupils or fewer.

Details, although seemingly insignificant, frequently have direct bearing on factors of greater importance. Consequently the preceding chapters and the appendices contain reports and descriptions which include a great many details. However, in this summary there are to be considered only those things which appear significant in providing the opportunities through which a pupil may secure a secondary education. It is believed that the environmental resources of the community, the physical equipment of the school, the administrative, supervisory, and

instructional staff, all have a direct bearing on the curricular and extra-curricular offering of the school.

**Environmental Resources** Let us first consider the environmental resources for secondary education in typical schools in certain of the groups studied, pointing out what are regarded as significant inequalities. It should be clearly understood that the term typical as herein used is limited to the 18 schools included in this study. Therefore, within the limits of this study, a typical school enrolling fewer than 50 pupils is located in a village of 200 to 500. This school has the following environmental resources: several small churches, and possibly a weekly newspaper, or a Boy Scouts organization, or a parent-teacher association. None of the schools of this size has all of these resources; some have only the churches.

Schools enrolling 150 to 200 pupils are in towns of 1,200 to 2,000. The environmental resources of these communities include churches, service clubs, and in addition probably one or two of the following: a public library, a golf course, a swimming pool, a factory. In rare cases the community may include a moving picture theatre, or a hospital, or Boy Scouts, or Camp Fire Girls, or a women's club.

Typical schools enrolling 300 to 500 pupils are in towns of 5,000 to 10,000. The environmental resources of these towns include hospitals, airports, factories, weekly newspapers, daily newspapers, Boy Scouts, Girl Scouts, Camp Fire Girls, service clubs, women's clubs, parks, golf courses, swimming pools, and municipal or community bands. Probably the communities also have Y. M. C. A.'s, Y. W. C. A.'s, parent-teacher associations, public libraries, museums, art galleries, botanical gardens, zoological gardens, radio broadcasting stations, moving picture theatres, legitimate theatres, symphony orchestras, operas, and colleges or universities.

Within the limits of this study schools enrolling 600 pupils or more are in larger towns which have all the environmental resources already enumerated as found in the towns in which the schools enroll 300 to 500 pupils.

It is apparent then that the inequalities in educational opportunities as determined by environmental resources are very

great. In fact, there may be reason to question seriously the value of the education gained by attending high schools enrolling 100 pupils or fewer, regardless of the efficiency of the schools themselves.

**Physical Plants** Let us next consider the physical plants of typical schools in certain of the groups included in this study. A school enrolling 100 pupils or fewer has grounds of one-half acre to one acre in size. The outdoor basketball court, available for use only in dry weather, probably contains numerous ditches as a result of erosion. A school enrolling 150 to 200 pupils may have grounds consisting of several acres. These grounds are partially landscaped and are provided with a football field. The school which enrolls 600 or more pupils has grounds ranging in area from three acres to forty acres. A football field, and in some cases a comparatively expensive stadium, a cinder track, and some tennis courts make possible organized outdoor play.

There seem to be great inequalities in the playground facilities furnished by schools in the various size-groups. Few playground facilities are provided in the smaller schools as compared with those in typical larger schools. If wholesome play and recreation have an important part in a program of secondary education, the pupils in the schools enrolling fewer than 100 are seriously handicapped, as far as playground facilities are concerned.

The classrooms in a typical school enrolling 100 pupils or fewer are, according to generally accepted standards, poorly lighted and poorly heated. These rooms usually have no bulletin boards, few maps or other aids to instruction, and no storage space for equipment. In the typical schools of 300 or above the classrooms meet generally accepted standards of lighting and ventilation, and are automatically kept at a constant temperature. Maps, charts, bulletin boards, and storage cases for equipment are furnished.

If classrooms are considered important adjuncts to instructional efficiency, those pupils attending schools of 100 or fewer are seriously handicapped by the inadequate classrooms used.

All of the 18 schools offer instruction in the sciences. In a typical school of 100 or fewer there is usually no laboratory pro-

vided, or if there is a laboratory, it ordinarily contains no running water, no gas, and very little equipment for purposes of instruction. In a typical school of 300 pupils or more the laboratories are equipped with gas, hot and cold water, modern laboratory desks, and several thousand dollars' worth of special equipment.

If it is desirable for pupils to have a wide variety of experiences and first-hand contacts with natural phenomena through laboratory instruction in the sciences, then the pupils in the schools enrolling fewer than 100 are at a decided disadvantage in this phase of their education.

These same schools of fewer than 100 pupils have no special classrooms, other than science laboratories and in a few cases classrooms fitted with old tables and typewriters. Typical schools enrolling 150 to 200 pupils have household arts laboratories, shops, commercial rooms, and possibly certain rooms fitted for instruction in music. While these rooms may be somewhat limited in their equipment, they do give the pupils an opportunity to participate in activities which are usually accepted as desirable. If special classrooms, such as shops, commercial rooms, or music rooms, are important aids in providing secondary education, the pupils in schools enrolling fewer than 100 pupils are handicapped in their training for leisure time and vocational activities.

In the typical school of fewer than 50 pupils there is no gymnasium, no dressing room or shower, no auditorium, and no cafeteria or lunch room. In the schools enrolling 300 to 500 pupils there are provided gymnasiums, dressing rooms, and auditoriums which meet generally approved standards. Possibly a cafeteria, which sells food at cost to pupils, is available.

If it is desirable that pupils form habits of play and recreation under favorable conditions in healthful surroundings, it follows that the pupils in the smaller schools are handicapped because of their limited opportunity to participate in such activities. If we assume that pupils should have an opportunity to take part in programs involving group activities in the manner in which they can be provided in well-planned gymnasiums and auditoriums, the lack of these facilities constitutes another

serious handicap in providing secondary education in the small high school.

In a typical school enrolling fewer than 50 pupils the library contains 300 to 700 uncatalogued volumes, many of which are poorly selected according to commonly approved standards. This same library receives regularly from one to four magazines. Such a library, with a pupil in charge, is ordinarily located in a small enclosure in the corridor and has no chairs or other provisions for study. The typical school enrolling between 150 and 200 pupils has approximately 500 to 1,600 uncatalogued volumes, and one to seven magazines which are regularly taken. The library is housed in a room probably adjacent to the study hall, where pupils may use the books as needed. Possibly a teacher-librarian is in charge.

The library in the typical school of 300 to 500 pupils contains approximately 1,600 to 5,000 catalogued volumes. As many as 35 magazines may be taken. In this school the library has quarters which meet generally accepted standards of lighting and ventilation. The floor has been treated to reduce the noise, and so to improve study conditions. Seating space is provided, and bookshelves may be open to the use of pupils. Possibly a full-time trained librarian is in charge of the library.

The library of the typical school enrolling 1,500 to 3,000 contains approximately 8,000 to 32,000 catalogued volumes, a comparatively large number of which are widely recommended for high school use. Sixty-four or more magazines may be regularly taken. The library is in charge of a staff of from one to eight full-time librarians.

It is believed that good library quarters and an extensive collection of books and magazines are valuable aids to instruction. Assuming that this generally accepted belief is true, we may then conclude that the pupils in schools enrolling 100 pupils or fewer have a limited opportunity to profit from the directed use of a large number of carefully chosen books and magazines. This inequality is further increased by the fact previously mentioned that the pupils in these small schools usually have access to no public libraries.

In summarizing the opportunities made available by the school

plants provided, the evidence warrants the conclusion that the small high schools are seriously handicapped with respect to grounds, classrooms, libraries, laboratories, shops, and similar special facilities.

**Administrative, Supervisory, and Instructional Staffs** It appears axiomatic that the quality of teaching in a school is a highly significant factor in determining the degree of educational opportunity afforded the pupil. While in this study no attempt has been made to evaluate the quality of teaching, certain facts concerning the teaching, administrative, and supervisory staffs may be mentioned as bearing on the problem.

As was pointed out in connection with the method of selecting the schools included in this study, the administrative head of each of these schools has done creditable graduate work, including study in the fields of high school administration and supervision, or has been recommended as a competent administrator. With the exception of the superintendent in School 97 and the principal of School 2,812 all these administrators have received the degree of Master of Arts from reputable institutions. However, in schools enrolling fewer than 300 pupils, with one exception, no teacher other than the administrator holds that degree. In typical schools enrolling 300 to 1,000 approximately 30 to 50 per cent of the classroom teachers have the degree of Master of Arts.

Except for the administrators in the smaller schools a smaller percentage of the teachers have attended universities than is the case in the larger schools. Judged by the extent of their academic training, the colleges and universities attended, and their experience, the teachers in schools enrolling 300 or more pupils are distinctly superior to those in the smaller schools.

In a typical school enrolling fewer than 50 pupils, the average salary paid to a teacher ranges from \$760 to \$1,013 for men and \$765 to \$810 for women. In schools enrolling 300 to 500 the average annual salary paid to a teacher ranges from \$1,355 to \$2,445 for men and \$1,400 to \$2,122 for women. In schools enrolling 1,500 to 3,000 the average annual salary paid to a teacher ranges from \$1,497 to \$3,230 for men and \$1,493 to \$3,060 for women. The salary inequalities herein revealed

throw at least some light on the reasons why teachers in the small high schools rather generally seek positions in larger schools.

**Offering** As was stated in the introductory chapter, there is considerable support for the belief that a secondary school should furnish a wealth of experiences for the pupil attending and that a broad and flexible offering should be provided. The program of studies in a typical school of 50 or fewer includes from eight to sixteen units of high school work. This work is limited to English, social studies, mathematics, science, and, in some cases, agriculture or typewriting. There are no elective courses.

Typical schools enrolling 50 to 100 offer only a slightly greater number of units of high school work. The number of units offered in the program of studies of a typical school of 150 to 200 ranges from 21 to 36 and includes English, mathematics, social studies, foreign languages, science, commercial subjects, household arts, agriculture, music, and physical education. The program of studies in typical high schools enrolling 300 or more pupils is similar except that courses in industrial arts and art are added, and more courses are included in each of the major divisions of subject-matter. As many as 65 units may be offered in one of the larger schools. Whereas the value of the content of the various courses offered in these schools is of obvious importance, this investigation does not attempt to evaluate such content. Judged solely by the range of courses offered and the number of units included in the programs of study, it is clear that the pupils in the schools enrolling 100 pupils or fewer have but limited choice in their selection of courses, as compared with pupils in larger schools. There is little opportunity for pupils in these schools to enroll in any courses except those usually considered as academic or college preparatory.

In typical schools enrolling fewer than 50 pupils the only extra-curricular activities are athletics and possibly a music or dramatics organization. In typical schools enrolling 150 to 200 pupils as many as 15 or 20 organized extra-curricular activities may be offered. These activities include musical or-



ganizations, dramatics, athletics, debating, and clubs connected with the curricular offering of the school—science clubs, art clubs, and similar organizations. In the larger of the 18 schools as many as 40 or more organized activities may be available from which the pupil may choose those best adapted to his interests and needs.

If we accept the belief that extra-curricular activities provide a wholesome means for meeting certain needs of the pupils by giving them group contacts, wide experiences, and broad interests, such activities should be a part of the school offering. The pupils in the schools enrolling fewer than 100 have but limited opportunity to receive the advantages of a program of extra-curricular activities.

It can scarcely be questioned that the physical welfare of pupils is of great importance. In typical schools enrolling 100 pupils or fewer there is no record of any physical defects discovered or corrected. There is no school nurse and no school physician. The typical school enrolling 300 to 500 pupils may possibly have a school nurse and a school physician. The typical school of 600 or more does employ both a school nurse and a school physician. The typical school of 300 or more keeps systematic records of health examinations, and in many cases, does a considerable amount of remedial health work.

Within the limits of this study, there seems to be little question that the physical welfare of pupils in typical schools enrolling 200 pupils or fewer is being neglected as far as the health programs of the schools are concerned, whereas a considerable amount of work is being done in the typical schools of 600 or more.

A typical school of 100 or fewer pupils makes no pretense of providing a guidance program. Few records are kept and little is done to help the pupil select those courses or occupations for which he may be best fitted and which seem to offer to him the largest returns. In the typical school enrolling 300 or more relatively extensive records may be kept concerning pupils, and a director of guidance, dean of boys, or dean of girls may be employed. A systematic effort is made to fit the individual pupil into that work which for him appears to be promising. The

evidence clearly indicates that the guidance of pupils in the schools enrolling 100 pupils or fewer is negligible as compared with that provided pupils in larger schools.

**Costs** Prohibitive costs to the pupil attending may seriously limit his opportunity to profit from the offering of a school. In typical schools of 200 or fewer, pupils must furnish all textbooks and other instructional supplies. In schools enrolling 300 or more some or all textbooks and a considerable amount of other instructional supplies may be provided by the school. Pupils attending schools enrolling 150 to 200 pupils may pay fees up to \$15.00 a year. In schools enrolling 300 to 500 there are no pupil fees. In a few cases in schools enrolling 600 or more fees ranging from 25 cents to 50 cents a year may be charged for the use of special equipment or supplies. There is little difference in the cost to the pupil of participation in the limited extra-curricular program of the small high schools and in the more extensive one of the larger high schools. In typical schools enrolling fewer than 50, each pupil has in connection with the annual commencement exercises expenditures which total approximately \$10.00 to \$10.00 plus a complete new outfit of clothing. In schools enrolling 300 or more the total cost to the pupil of participating in the various exercises connected with graduation is probably from \$5.00 to \$8.00. Within the limits of this study it is evident that costs to the pupil attending are greater in schools enrolling fewer than 200 pupils than in typical schools in any of the other groups.

Although the cost of instruction to the supporting community or state deals only indirectly with the degree of educational opportunity offered to pupils attending, it is an important factor in determining the efficiency of a school system. As was stated in the opening chapter, for purposes of this study the instructional costs are computed in terms of pupil enrollment and are determined on the basis of the salaries paid to teachers and principals including also the percentage of superintendents' salaries allocated to teaching. In the four-year high schools enrolling fewer than 50 pupils the annual cost ranges from \$67.50 to \$96.63 per pupil. In schools enrolling from 50 to

100 pupils the instructional cost per pupil enrolled ranges from \$28.93 to \$48.08. In schools enrolling 600 to 1,000 the instructional cost per pupil enrolled is \$33.46 to \$66.75, while in schools enrolling 1,500 to 3,000 pupils the instructional cost per pupil enrolled is \$50.84 to \$117.00. The cost of instruction is greater in the four-year high schools enrolling fewer than 50 pupils than in any, except two, of the other fifteen four-year schools.

It is clear that serious inequalities exist among the high schools of various sizes included in this study. In comparison with the larger schools the high schools of 100 or fewer pupils are severely handicapped with respect to their environmental resources, their physical plants, their administrative, supervisory and instructional staffs, their curricular and extra-curricular offerings, including their programs for health and guidance. Furthermore, the expenditures of the pupil attending are greater in schools enrolling fewer than 200 pupils than in typical schools in any of the other groups, and the cost of instruction to the supporting community and state per pupil enrolled is greater in four-year high schools enrolling 50 pupils or fewer than in typical schools of any other of the groups included in this study. The cost of instruction per pupil enrolled is approximately as great in schools enrolling from 50 to 100 pupils as in schools enrolling from 150 to 200 pupils, and is only slightly less than in schools enrolling from 600 to 1,000.

Public high schools are maintained in approximately 900 districts in the State of Missouri. The State Department of Education officially divides all public high schools into first-class, second-class, third-class, and unclassified groups. It should be pointed out that with one exception the schools included in this study are officially rated as first-class high schools fully accredited by the State Department of Education. It should also be noted that in the letters from the State Department of Education, written during the current year, all of the schools received considerable official commendation and suggestions for improvement were few and minor.

### Suggested Problems for Further Investigation

Since this study is based upon a limited number of high schools and since these are in a sense selected institutions, general, sweeping conclusions with respect to the high schools of Missouri or to the status of secondary education in Missouri are, of course, unwarranted. However, it is believed that the findings of this study are sufficiently significant to indicate a serious need for further study and investigation of the entire problem of providing equality of opportunity in the high schools of the state. Some of the questions and problems raised, either directly or by implication, are as follows:

1. What is the optimum enrollment of a public secondary school?
2. At what point does smallness of enrollment begin to operate as a direct and serious cause of inefficiency in presenting a program of secondary education?
3. To what extent are the problems of the smaller high school financial in their nature?
4. Precisely what are the more important factors most likely to contribute to the inefficiency of the high school of limited size?
5. What are the special problems of teaching and administering the relatively small high school?
6. How may the academic and professional preparation of high school teachers and administrators be made to have a larger functional value?
7. Should the academic and professional training of teachers and administrators differ for high schools of various sizes, and, if so, specifically what should these differences be?
8. To what extent would it be practicable and advisable to consolidate high schools upon a county basis or into units of comparable size?
9. If we assume that the relatively small high school will continue to exist in sparsely settled communities, by what practicable arrangements can the curricular offering be enriched and enlarged?

10. Specifically what is the effect of college entrance requirements upon the program of education offered in the small high school?
11. Should the program of extra-curricular activities offered in the small high school differ from that offered in the larger high school and, if so, how should it differ?
12. How may the work of the public high schools throughout the state be most effectively coordinated and improved?
13. How may official inspection be made more effective?
14. What is the function of the state teachers' colleges and the state university with respect to furnishing leadership in secondary education in the state and how may this function be most effectively discharged?

# APPENDIX I

## CHECKING LISTS

.....  
Name of High School

### Visitation Schedule

1. Check all information blanks which seem to have any discrepancies.
2. Call for schedule of recitations, program of studies, and list of extra-curricular activities, if these have not been secured.
3. Check environmental facilities.
4. Score building.
5. Check books in library against selected list. Secure list of magazines in library.
6. How many years of administrative experience has the principal had?..... superintendent?.....
7. What does the principal consider to be the purpose of this high school?
8. Examine any printed or mimeographed courses of study.
9. Secure list of textbooks (include copyright dates).
10. Check program of studies for alternating subjects.
11. What courses included in each of the curricula are required? ..... elective? .....
12. How many field trips have pupils made this year?..... Which classes?..... Where?.....
13. Examine workbooks and notebooks in science classes. (Record on separate sheet any comments.)
14. How is participation in extra-curricular activities limited? .....
15. To what extent is there an intramural athletics program? .....
16. Secure copy of last year's commencement program.
17. Check to see if health information pertains only to high school.
18. Secure copies of forms used in keeping health records. (Check items which inspection shows are usually filled out.)

19. Secure copies of forms used in keeping guidance records.  
(Check items which inspection shows are usually filled out.)
20. Check number of non-resident pupils in high school.
21. Examine any follow-up records of graduates.
22. Examine records of any community surveys which have been made.
23. Costs—Are texts furnished?..... What supplies?.....  
What fees are charged for courses?.....  
What fees or dues for extra-curricular activities?.....  
Approximate cost to pupils for such extra-curricular activities as the average pupil is expected to attend or engage in?.....  
Commencement—What is the cost to pupils of senior play?.....  
..... junior-senior banquet?..... rings or pins?..... invitations and cards?..... dress?.....  
..... total?.....

.....  
Name of High School

### Checking List for Environmental Facilities

1. Libraries
  - A. Number
  - B. Type
  - C. Size
2. Museums
3. Art Galleries
4. Botanical Gardens
5. Zoological Gardens
6. Parks
7. Golf Courses
8. Swimming Pools
9. Theatres
  - A. Moving Picture
    - a. Number
    - b. Frequency of Productions
  - B. Legitimate
    - a. Number
    - b. Frequency of Productions
10. Municipal Bands
11. Symphony Orchestras
12. Operas
13. Colleges
  - A. Type
  - B. Enrollment

14. Churches (Number)
15. Hospitals (Number)
16. Airports
17. Street-cars
18. Railroads
19. Steamboats
20. Newspapers
  - A. Daily
  - B. Weekly
21. Broadcasting Stations
22. Factories
23. Y. M. C. A.
24. Y. W. C. A.
25. Boy Scouts
26. Girl Scouts
27. 4-H Clubs
28. Parent-Teacher Associations
29. Service Clubs
  - A. Names
  - B. Activities
30. Women's Clubs
  - A. Names
  - B. Activities
31. Additional Environmental Facilities

-----  
Name of High School

### Checking List for Science Department

After each item in the following list make a check mark (✓) in the column below the name of the science class in which that item is available. For example, if "running water" at the lecture desk is available for use in the chemistry class, place a check mark after the item "running water" in the column headed "Chemistry." If it is available for use in the physics class also, place a check in the column headed "Physics," etc.

Items	Available in the following class			
	Chem.	Physics	Biology	Gen. Sci.
Lecture desk supplied with				
running water				
hot water				
sink				
city gas				



gas made by school plant				
gas purchased in tanks				
alternating current				
direct current				
from motor				
from storage battery				
from dry cells				

## Laboratory supplied with

running water				
hot water				
sinks (how many?)				
city gas				
gas made by school plant				
gas purchased in tanks				
alternating current				
direct current				
from motor				
from storage battery				
from dry cells				

Laboratory, lecture room,  
or combination classroom  
equipped with

fume-hood				
work-bench				
display case				
projection lantern				
opaque projector				
micro-projector (or attachment)				
motion picture projector				

How much money was spent for equipment for the science department during the past 12 months?..... Are pupils required to keep a notebook, workbook, or record of experiments they perform in General Science?..... Physics?..... Biology?..... Chemistry?..... Are they required to keep a notebook, workbook, or record of demonstrations they see in General Science?..... Physics?..... Biology?..... Chemistry?..... Does the instructor consider the equipment reasonably adequate for instruction in General

Science? ..... Physics? ..... Biology? ..... Chem-  
 istry? .....

.....  
 Name of High School

### Checking List for Information Concerning Guidance Program

1. Does this school have a director of guidance?.....  
 a dean of boys?..... a dean of girls?..... visiting  
 teachers? (How many?).....
2. What intelligence tests are given to pupils in this school?  
 a. Group tests?.....  
 b. Individual tests?.....
3. What special aptitude tests?.....
4. What achievement tests?.....
5. What tests of personality or character?.....
6. What records of personal data are kept concerning pupils?  
 .....
7. What provisions are made for the use of these records?  
 .....
8. When are pupils' individual programs for the fall semester  
 formulated?..... What is the procedure in  
 formulating the program?.....
9. When are pupils' extra-curricular activities selected?  
 ..... What is the procedure in formulating  
 the individual's program of extra-curricular activities?  
 .....
10. What machinery is provided for adjusting the content of  
 courses to the individual needs and abilities of pupils?  
 .....
11. What machinery is provided for adjusting pupils to the  
 school program?  
 a. Slow pupils?.....  
 b. Gifted pupils?.....  
 c. Indolent pupils?.....
12. What surveys of community occupations have been made  
 by this school?.....
13. What follow-up records are kept concerning graduates?  
 .....
14. What information concerning the future vocational plans  
 of pupils is on file?.....
15. In what ways are pupils aided in selecting those vocations  
 for which they are best fitted?.....  
 .....

16. What does the principal consider to be the objectives of the guidance program? .....

.....  
Name of High School

### Checking List for Information Concerning Health Program

1. How much money has been spent during the last 12 months for the health care of pupils?.....
2. To what extent is a remedial program for pupils attempted in regard to
  - a. dental care?.....
  - b. school lunches? .....
  - c. minor surgical operations (e. g., removal of adenoids and tonsils)? .....
  - d. providing glasses? .....
  - e. vaccinations or inoculations?.....
  - f. other special items?.....
3. To what extent does the school budget pay for the remedial health program in the foregoing items? .....
4. How many remediable defects were discovered in pupils during the past 12 months?.....
5. How many non-remediable defects were discovered in pupils during the past 12 months?.....
6. How many defects were corrected during the past 12 months? .....
7. How frequently are pupils in this school given health or physical examinations?.....
8. Who conducts health examinations that are given?.....
9. What items are included in the health examination?.....
10. Is a health examination of teachers required just before or at the beginning of first employment?.....
11. Is there a school nurse? .....
12. Is there a school physician? .....
13. Is there a school dentist? .....
14. What health records are kept?.....
15. What provision is made for the use of these records?.....
16. To what extent are remedial instruction and exercises attempted in physical education classes?.....

17. In what activities do boys' physical education classes participate? (Give the percentage of time devoted to each.)
  18. In what activities do girls' physical education classes participate? (Give the percentage of time devoted to each.)
- 

### Checking List of Specifications for School Buildings

This list is based upon the standards for school buildings as recommended by the Missouri State Department of Education. The list contains 284 items covering the following divisions: site and building location, construction, classrooms, activity and special rooms, corridors, stairways and exits, heating and ventilation, fire protection—escapes, plumbing, electrical service, administrative units. This list of items was arranged by J. T. Brooks, Russell Ellis, and Dewey Smith under the official direction of Dr. W. W. Carpenter, Professor of Education, University of Missouri.

### Checking List for High School Libraries

This list of 241 titles was prepared by including every fifth title from the list of books recommended for first purchase in *The Standard Catalog for High School Libraries, Second Edition Revised and Enlarged*, 1932, and *Second Supplement (Cumulative) to Standard Catalog for High School Libraries, Second Edition Revised*, 1934.

**APPENDIX II**  
**TABLES OF ORIGINAL DATA**

TABLE III  
ENVIRONMENTAL FACILITIES ACCESSIBLE TO SELECTED HIGH SCHOOLS

School Number	Items (a)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
30															x
39															x
42									x						x
81															x
97									x						x
98														x	x
167															x
188															x
192	x	x					x		x						x
356	x	x	x	x			x	x	x	x	x	x			x
448	x	x					x	x	x	x	x	x			x
468	x	x	x	x			x	x	x	x					x
610	x						x	x	x						x
665	x						x	x	x						x
993	x	x	x	x			x	x	x	x	x	x			x
1916	x	x	x				x	x	x	x	x				x
2078	x	x	x				x	x	x	x	x				x
2812	x	x	x	x			x	x	x	x	x	x	x	x	x

(a) Definition of items:

1. Public library
2. Museum
3. Art gallery
4. Botanical garden
5. Zoological garden
6. Park
7. Golf course
8. Swimming pool
9. Moving picture theatre
10. Legitimate theatre
11. Municipal or community band
12. Symphony orchestra
13. Opera
14. College
15. Church

Note: Cross (x) indicates presence of item.

(Table III continued on next page)

TABLE III (Continued)

ENVIRONMENTAL FACILITIES ACCESSIBLE TO SELECTED HIGH SCHOOLS

School Number	Items (a)																	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
30.....																		1
39.....						x												2
42.....						x					x				x			3
81.....																		4
97.....						x						x					x	5
98.....						x												6
167.....						x					x							7
188.....													x					8
192.....	x			x		x					x							9
356.....	x	x	x	x	x	x	x		x	x	x	x	x	x			x	10
448.....	x	x	x	x	x	x	x		x		x	x	x	x	x		x	11
468.....	x	x	x	x	x	x	x		x	x	x	x	x	x			x	12
610.....	x	x	x	x	x	x	x		x	x	x				x		x	13
665.....	x	x	x	x							x	x			x		x	14
993.....	x	x	x	x	x	x	x		x		x	x			x		x	15
1916.....	x	x	x	x	x	x	x		x	x	x	x			x		x	16
2078.....	x	x	x	x	x	x	x		x	x	x	x			x		x	17
2812.....	x	x	x	x	x	x	x		x	x	x	x			x		x	18
																		19
																		20
																		21
																		22
																		23
																		24
																		25
																		26
																		27
																		28
																		29
																		30
																		31
																		32
																		33

(a) Definition of items:

16. Hospital  
17. Airport  
18. Street-car  
19. Factory  
20. Steamboat  
21. Weekly newspaper

22. Daily newspaper  
23. Radio broadcasting station  
24. Y. M. C. A.  
25. Y. W. C. A.  
26. Boy Scouts  
27. Girl Scouts

28. Camp Fire Girls  
29. 4-H Club  
30. Parent-teacher association  
31. Service clubs  
32. Women's clubs  
33. Total

TABLE IV

NUMBER OF ITEMS IN WHICH SELECTED HIGH SCHOOL BUILDINGS MEET  
APPROVED SPECIFICATIONS

School Number	Division of Building Score Card (a)											
	1	2	3	4	5	6	7	8	9	10	11	12
30.....	5	5	21	3	3	12	3	0	0	1	0	53
39.....	6	7	26	2	4	11	4	2	0	1	0	63
42.....	4	6	19	2	2	11	3	2	0	0	0	49
81.....	5	7	23	8	3	11	3	2	0	1	0	63
97.....	6	6	36	15	4	17	4	2	5	1	0	96
98.....	6	6	21	6	2	8	3	0	1	1	0	54
167.....	5	5	33	16	4	14	3	2	6	0	0	88
188.....	11	9	32	35	5	14	2	0	6	1	1	116
192.....	10	12	42	35	7	20	5	3	7	4	4	149
356.....	5	12	49	46	7	22	11	5	10	6	2	175
448.....	6	13	38	52	6	20	7	2	8	4	1	157
468.....	11	12	53	89	3	18	7	4	10	5	5	217
610.....	13	14	52	63	6	21	7	5	10	6	5	202
665.....	12	13	42	44	5	19	8	5	10	4	3	165
993.....	12	14	51	75	7	21	9	5	10	6	5	215
1916.....	5	8	32	62	3	17	9	5	10	4	5	160
2078.....	11	13	42	87	5	20	7	5	10	6	5	211
2812.....	11	15	51	68	7	20	9	5	11	6	6	209

(a) Definition of divisions:

1. Site and building location
2. Construction
3. Classrooms
4. Activity and special rooms
5. Corridors
6. Stairways and exits
7. Heating and ventilation
8. Fire protection—escapes
9. Plumbing
10. Electrical service
11. Administrative units
12. Total building

**Table reads**—Building 30 meets the specifications on five items under division, site and building location, on building checking list; etc.



TABLE V  
GENERAL INFORMATION CONCERNING BUILDINGS HOUSING SELECTED  
HIGH SCHOOLS

School Number	Date of Construction of Original Bldg.	Cost of Bldg.	Elementary Grades in Same Bldg.	Running Water in Bldg.	Sanitary Sewer Connection
30.....	1910	\$ 9,000	x	..	..
39.....	1910	10,000	x	..	..
42.....	1912	12,000	x	..	..
81.....	1913	33,500	x	x	..
97.....	1915	20,000	x	x	..
98.....	1926	17,000	..	x	..
167.....	1895	75,000	x	x	x
188.....	1912	80,000	x	x	x
192.....	1927	85,000	x	x	x
356.....	1930	107,000	..	x	x
448.....	1914	78,000	..	x	x
468.....	1916	177,549	..	x	x
610.....	1926-27	415,000	..	x	x
665.....	1924	300,000	x	x	x
993.....	1929-30	492,240	..	x	x
1916.....	1893	210,000	..	x	x
2078.....	1914	661,110	..	x	x
2812.....	1926	1,635,959	..	x	x

Note: Cross (x) indicates presence of item.

TABLE VI  
SPECIFIC FEATURES IN BUILDINGS OF SELECTED HIGH SCHOOLS

School Number	Items (a)											
	1	2	3	4	5	6	7	8	9	10	11	12
30.												
39.												
42.										x		
81.	x	x		x	x					x		
97.				x						x		
98.	x	x		x	x					x		
167.				x								
188.	x	x		x			x		x	x		x
192.	x	x		x	x					x		x
356.	x	x		x	x					x		
448.	x	x		x	x					x		
468.	x	x		x	x					x		
610.	x	x		x	x					x		
665.	x	x		x	x					x		
993.		x		x	x					x		
1916.	x	x		x	x					x		
2078.	x	x		x	x					x		
2812.	x	x		x	x					x		

(a) Definition of items:

1. Auditorium
2. Gymnasium
3. Swimming pools
4. Shower rooms for boys
5. Shower rooms for girls
6. Rest rooms for boys
7. Rest rooms for girls
8. Rest rooms for teachers
9. Health clinic rooms
10. Science laboratories
11. Manual Training rooms
12. Home Economics rooms

Note: Cross (x) indicates presence of item.

(Table VI continued on next page)

TABLE VI (Continued)  
SPECIFIC FEATURES IN BUILDINGS OF SELECTED HIGH SCHOOLS

School Number	Items (a)							
	13	14	15	16	17	18	19	20
30.....								
39.....				x		x		
42.....		x				x		
81.....						x		
97.....								
98.....				x			x	x
167.....						x		x
198.....		x			x			
192.....	x	x		x	x	x		x
356.....	x	x		x		x		x
448.....				x				x
468.....	x	x		x	x			x
610.....	x	x	x	x	x	x	x	x
665.....	x	x	x	x	x	x	x	x
993.....	x	x		x	x	x	x	x
1916.....	x	x	x	x	x	x		x
2078.....	x	x	x	x	x			x
2812.....	x	x	x	x	x	x	x	x

(a) Definition of items:

13. Shops  
14. Music rooms  
15. Art rooms  
16. Specially equipped commercial rooms  
17. Lunch rooms  
18. Athletic fields and playgrounds  
19. Indoor toilets  
20. Lockers

Note: Cross (x) indicates presence of item.

**TABLE VII**  
**ESTIMATED VALUE OF GENERAL EQUIPMENT IN**  
**SELECTED HIGH SCHOOLS (a)**

School Number	Items (b)									
	1	2	3	4	5	6	7	8	9	10
30.....	\$ 60		\$ 25				\$ 200			\$ 100
39.....			5							50
42.....	50		5					\$ 100		150
81.....	100	\$ 25								40
97.....	100						400			100
98.....	75	40	10				250	150		10
167.....	100	50				\$ 150	50	50		125
188.....	400	35	250	\$ 20		1500	400	50		50
192.....	178	394	657			416	1018	698		37
356.....	300	400		25			1800	200	\$ 25	200
448.....	400	100			\$1200	1800	1500	100		200
468.....	300	400	24000		3500	600	1200	3500	200	150
610.....	650	400	2000	14	1000	1200	2500	1200	180	150
665.....	400	400	1000			1200	200	3000		150
993.....	1500	4000	83000	200	10000	4000	2500	800	2000	250
1916.....	1000	2500		50	8000	2500	9000	5000	300	2000
2078.....	2000	2500	25000	500	25000	5000	10000	5000	2500	1200
2812.....	2000	1792	1791	500	12116	2750	6510	6525	1387	750

(a) Based on office records, principals' statements, and writer's judgment.

(b) Definition of items:

1. Office
2. Gymnasium
3. Athletic fields and playgrounds
4. Health Clinic
5. Industrial Arts
6. Household Arts
7. Commerce
8. Music
9. Art
10. Maps and charts

TABLE VIII  
CERTAIN LABORATORY EQUIPMENT IN  
SELECTED HIGH SCHOOLS

School Number	ITEMS (a)						
	Fume Hood	Dis- play Case	Projec- tion Lantern	Opaque Pro- jector	Micro- pro- jector	Motion Picture Pro- jector	Work- bench
30....	..	..	..	..	x	..	..
39....	..	..	..	..	..	..	..
42....	..	..	..	..	..	..	..
81....	..	..	..	..	..	..	..
97....	..	..	..	..	..	..	..
98....	..	..	..	..	..	..	..
167....	..	..	..	..	..	..	..
188....	..	..	..	..	..	..	..
192....	x	x	..	..	x	..	x
356....	x	x	..	..	..	..	..
448....	x	x	x	..	..	..	..
468....	..	x	x	..	x	x	x
610....	x	..	x	..	x	..	..
665....	..	x	..	..	..	..	x
993....	x	x	x	x	x	x	x
1916....	x	x	x	..	x	..	x
2078....	x	x	x	x	..	x	x
2812....	x	x	x	x	x	x	x

(a) Cross (x) indicates science laboratory, lecture room, or combination classroom is equipped with the item.

**TABLE IX**  
**CERTAIN LABORATORY FACILITIES IN SELECTED**  
**HIGH SCHOOLS**

School Number	Items (a)			
	Running Water	Gas	Alternating Current	Direct Current (b)
30.....	..	x	x	..
39.....	..	..	x	..
42.....	..	..	x	..
81.....	..	..	x	..
97.....	x	..	x	..
98.....	..	..	x	..
167.....	x	..	x	..
188.....	x	..	x	..
192.....	x	x	x	x
356.....	x	x	x	x
448.....	x	x	x	x
468.....	x	x	x	x
610.....	x	x	x	x
665.....	x	x	x	..
993.....	x	x	x	x
1916.....	x	x	x	x
2078.....	x	x	x	x
2812.....	x	x	x	x

(a) Cross (x) indicates laboratory is supplied with item.

(b) From dry cells, rectifier, storage battery, or motor.

**TABLE X**  
**LIBRARY FACILITIES IN SELECTED HIGH SCHOOLS**

School Number	Items		
	Number of Books	Number of Titles on Selected List	Number of Magazines Regularly Taken
30.....	700	3	1
39.....	378	27	0
42.....	698	9	4
81.....	102	0	0
97.....	1,300	29	16
98.....	796	9	0
167.....	476	1	1
188.....	1,656	26	7
192.....	1,219	9	2
356.....	1,600	22	1
448.....	3,625	21	1
468.....	4,873	55	35
610.....	4,076	50	23
665.....	10,000	44	35
993.....	5,500	55	24
1916.....	16,681	74	66
2078.....	32,000	176	64
2812.....	8,350	46	24

**TABLE XI**  
**INSTITUTIONS ATTENDED AND DEGREES HELD BY THE**  
**TEACHERS (a) IN SELECTED HIGH SCHOOLS**

School Number	Institutions Attended						Degrees Held					
	Teachers Colleges		Liberal Arts Colleges		Uni- versities		Bach- elors		Masters		Doctors	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
30.....	1	33	2	67	2	67	3	100	2	67	..	...
39.....	1	50	1	50	2	100	1	50	1	50	..	...
42.....	3	100	..	..	2	67	3	100	1	33	....	...
81.....	1	25	4	100	3	75	2	50	1	25	....	...
97.....	3	75	1	25	3	75	4	100	..	..	....	...
98.....	4	100	..	..	1	25	4	100	1	25	....	...
167.....	5	71	2	29	3	43	7	100	1	14	..	...
188.....	6	60	5	50	8	80	10	100	1	10	....	...
192.....	6	67	3	33	6	67	8	89	1	11	....	...
356.....	4	40	4	40	9	90	10	100	5	50	....	...
448.....	6	50	4	33	11	92	12	100	5	42	....	...
468.....	6	26	7	30	22	96	23	100	10	43	....	...
610.....	10	43	5	22	23	100	22	96	11	48	....	...
665.....	8	62	2	15	8	62	13	100	1	8	....	...
998.....	11	34	10	31	30	94	32	100	10	31	....	...
1916.....	33	58	31	54	39	68	53	93	7	12	....	...
2078.....	40	63	13	21	61	97	44	70	20	32	....	...
2812.....	57	56	27	27	99	98	86	85	40	40	3	3

(a) Includes only the teachers who teach one or more courses offered for high school credit.



TABLE XII  
 SEMESTER HOURS OF ACADEMIC AND PROFESSIONAL CREDIT  
 EARNED BY THE TEACHERS (a) IN SELECTED  
 HIGH SCHOOLS

School Number	Academic						Professional					
	120-150 Hours		151-180 Hours		181 and More Hours		Less than 15 Hours		15-31 Hours		32 and More Hours	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
30									2	67	1	33
39							1	50			1	50
42									2	67	1	33
81							1	25	2	50	1	25
97											4	100
98									2	50	2	50
167									2	29	5	71
188	2	20							6	60	4	40
192	1	11							6	67	2	22
356	3	30	2	20					6	60	4	40
448	5	42							6	50	7	59
468	13	57	3	13					15	65	8	34
610	8	35	4	17					11	48	13	57
665	5	38	1	8					10	77	4	31
993	11	34	4	13	1	3			19	59	13	41
1916	15	26	7	12			2	3	33	58	25	44
2078	15	24	6	10	4	6	5	8	19	30	38	60
2812	26	26	10	10	6	6	20	20	45	45	37	37

(a) Includes only the teachers who teach one or more courses offered for high school credit.

**TABLE XIII**  
**SALARIES RECEIVED BY TEACHERS, PRINCIPALS, AND**  
**SUPERINTENDENTS IN SELECTED HIGH SCHOOLS**

School Number	Items (a)					
	1	2	3	4	5	6
30.....	\$ 765	\$1225	\$ 995	\$ 765	\$ 765	\$1225
39.....	640	880	760	(b)	880	(c)
42.....	810	1215	1013	810	810	1215
81.....	765	1170	900	765	765	1170
97.....	1000	1520	1260	1000	(d)	1520
98.....	540	1125	765	540	(d)	1125
167.....	540	1350	930	675	720	1350
188.....	765	1650	1153	770	1150	1650
192.....	855	1500	1070	855	900	1920
356.....	1092	2024	1355	1400	2300	3324
448.....	1200	2640	1789	1420	1800	3900
468.....	1674	2850	2445	2122	4000	8100
610.....	1035	1498	1341	1121	2000	3600
665.....	1000	2105	1454	1140	2335 (e)	3232 (f)
993.....	1000	3000	1841	1522	3506	4500
1916.....	955	2833	1497	1493	3500	5417
2078.....	1280	2560	2218	2014	4000	(g)
2812.....	1620	3600	3230	3060	5400	(g)

(a) Definition of Items:

1. Lowest annual salary paid to a full-time teacher.
  2. Highest annual salary paid to a full-time teacher.
  3. Average salary for men.
  4. Average salary for women.
  5. Salary of principal.
  6. Salary of superintendent.
- (b) In this school both the teachers are men.
- (c) This school has no superintendent.
- (d) These schools have no principals.
- (e) Salary of former principal who was promoted to superintendency during the current year.
- (f) Salary of former superintendent who resigned during the current year.
- (g) In these schools the superintendents have no immediate supervision over the high school.

TABLE XIV  
TOTAL NUMBER OF UNITS OFFERED IN SELECTED HIGH SCHOOLS (a)

School Number	Units
30.....	16
39.....	8
42.....	16
81.....	16
97.....	21
98.....	20
167.....	21
188.....	29
192.....	36
356.....	29
448.....	34
468.....	47
610.....	35
665.....	38
993.....	49
1916.....	61
2078.....	65
2812.....	52

- (a) Includes courses offered alternate years, whether or not offered during the current year, but does not include certain activities included elsewhere as extra-curricular activities.

TABLE XV  
COURSES OFFERED DURING THE CURRENT YEAR IN SELECTED HIGH SCHOOLS

School Number	Mathematics (1)								English (2)								Latin (3)						
	a	b	c	d	e	f	g	h	a	b	c	d	e	f	g	h	i	j	k	a	b	c	d
30.....				x					x	x	x		x	x	x								
39.....		x		x					x	x	x		x										
42.....		x		x			x		x	x	x		x										
81.....		x		x			x		x	x	x		x										
97.....		x		x					x	x	x		x										
98.....	x	x		x					x	x	x		x							x			
167.....		x		x					x	x	x		x			x				x			
188.....		x		x			x		x	x	x		x	x	x								
192.....	x	x		x					x	x	x		x	x									
356.....		x		x					x	x	x		x										
448.....		x		x					x	x	x		x										
468.....	x	x		x					x	x	x		x										
610.....		x		x			x		x	x	x		x										
665.....		x		x					x	x	x		x										
993.....	x	x		x					x	x	x		x										
1916.....		x		x					x	x	x		x										
2078.....		x		x					x	x	x		x										
2812.....		x		x					x	x	x		x										

1. Mathematics  
a. General Mathematics  
b. First Year Algebra  
c. Advanced Algebra  
d. Plane Geometry  
e. Solid Geometry  
f. Trigonometry  
g. Arithmetic (Academic)  
h. Intermediate Algebra
2. English  
a. Freshman Year  
b. Sophomore Year  
c. Junior Year  
d. Senior Year  
e. Journalism  
f. Public Speaking  
g. Debating  
h. Dramatics  
i. Senior Composition  
j. American Literature  
k. Advanced Composition
3. Latin  
a. First Year  
b. Second Year  
c. Cicero  
d. Virgil
- (Table XV continued on next page)

TABLE XV (Continued)  
COURSES OFFERED DURING THE CURRENT YEAR IN SELECTED HIGH SCHOOLS

School Number	French (4)				German (5)				Spanish (6)			
	a	b	c	d	a	b	c	d	a	b	c	d
30												
39												
42												
81												
97												
98												
167												
188												
192												
356												
448												
468												
610	x	x	x	x								
665	x	x	x	x								
998												
1916	x	x	x	x								
2078	x	x	x	x								
2812	x	x	x	x								

4. French  
 a. First Year  
 b. Second Year  
 c. Third Year  
 d. Fourth Year
5. German  
 a. First Year  
 b. Second Year  
 c. Third Year  
 d. Fourth Year
6. Spanish  
 a. First Year  
 b. Second Year  
 c. Third Year  
 d. Fourth Year

(Table XV continued on next page)

TABLE XV (Continued)  
COURSES OFFERED DURING THE CURRENT YEAR IN SELECTED HIGH SCHOOLS

School Number	Social Studies (7)													Science (8)													
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	a	b	c	d	e	f	g	h	i	
30.....			x			x	x													x							
39.....		x																x									
42.....		x	x			x	x					x						x					x		x		
81.....		x	x			x	x											x					x		x		
97.....		x	x			x	x					x						x									
98.....		x	x			x	x						x					x									
167.....		x	x			x	x					x						x									
188.....		x	x			x	x					x						x									
192.....		x	x			x	x					x						x									
356.....		x	x			x	x											x									
448.....		x	x			x	x					x						x									
468.....	x	x	x			x	x					x						x									
610.....	x	x				x	x						x					x									
665.....		x				x	x											x									
993.....		x				x	x											x									
916.....		x				x	x											x									
2078.....						x	x						x														
2812.....						x	x											x									
7. Social Studies														8. Science													
a. Occupations														a. General Science													
b. Community Civics														b. Physical Geography													
c. High School Geography														c. Biology													
d. Ancient History														d. Botany													
e. Modern European History														e. Zoology													
f. World History														f. Physics													
g. American History														g. Chemistry													
h. English History														h. Physiology													
i. Economics														i. Physiography													
j. Sociology														j.													

(Table XV continued on next page)



TABLE XV (Continued)  
COURSES OFFERED DURING THE CURRENT YEAR IN SELECTED HIGH SCHOOLS

School Number	Household Arts (11)							Agriculture (12)				Music (13)						Art (14)			
	a	b	c	d	e	f	g	a	b	c	d	a	b	c	d	e	f	a	b	c	d
30								x													
39								x													
42																					
81									x												
97									x												
98												x									
167												x									
188																					
192																					
356																					
448																					
468																					
610																					
665																					
993																					
1916																					
2078																					
2812																					
11. Household Arts	12. Agriculture							13. Music (Partially extra-curricular in some cases)							14. Art						
a. Freshman Year	a. Freshman Year							a. Chorus							a. Freshman Year						
b. Sophomore Year	b. Sophomore Year							b. Glee Club							b. Sophomore Year						
c. Junior Year	c. Junior Year							c. Band							c. Junior Year						
d. Senior Year	d. Senior Year							d. Orchestra							d. Senior Year						
e. Boys' Home Economics								e. Instrumental (Individual)													
f. Home Decorations								f. Harmony													
g. Home Relationships																					

(Table XV continued on next page)

(Table XV continued on next page)



TABLE XV (Continued)  
COURSES OFFERED DURING THE CURRENT YEAR IN SELECTED HIGH SCHOOLS

School Number	Physical Education (15)					Psychology (16)	Bible (17)
	a	b	c	d	e		
30.....	x	x	x	x			
39.....							
42.....							
81.....	x	x	x	x			
97.....	x	x	x	x			
98.....	x	x	x	x			
167.....	x	x	x	x			
188.....	x	x	x	x			
192.....	x						
356.....	x	x	x	x		x	
448.....	x	x	x	x			
468.....	x	x	x	x			
610.....		x	x	x	x		
665.....	x	x	x	x	x		
993.....	x	x	x	x			
1916.....							x
2078.....	x	x	x	x		x	
2812.....	x	x	x	x			

15. Physical Education (Usually with reduced credit)

a. Freshman Year

b. Sophomore Year

c. Junior Year

d. Senior Year

e. Hygiene

16. Psychology

17. Bible

**TABLE XVI**  
**EXTRA-CURRICULAR ACTIVITIES OFFERED IN**  
**SELECTED HIGH SCHOOLS (a)**

School Number	Items (b)							
	1	2	3	4	5	6	7	8
30.....	x	x	x	..	..	..	..	4
39.....	..	..	x	..	..	..	..	2
42.....	x	..	x	x	..	..	..	2
81.....	..	x	x	..	..	..	..	2
97.....	..	..	x	..	x	..	..	5
98.....	x	..	x	..	..	x	..	5
167.....	..	..	x	..	..	..	..	2
188.....	x	..	x	..	x	x	..	15
192.....	x	x	x	x	x	..	x	20
356.....	x	x	x	x	x	x	x	16
448.....	x	x	x	..	x	..	x	20
468.....	x	x	x	x	x	x	x	29
610.....	x	x	x	x	x	x	x	29
665.....	x	x	x	x	x	x	x	18
993.....	x	x	x	x	x	x	x	20
1916.....	x	x	x	x	x	x	x	37
2078.....	x	x	x	x	x	x	x	44
2812.....	x	x	x	x	x	x	x	43

(a) Definition of items:

1. Music
2. Dramatics
3. Athletics
4. Debating
5. Activities related to regular school subjects
6. Publications
7. Miscellaneous
8. Total number of extra-curricular activities offered by the school

(b) Cross (x) indicates presence of item.

TABLE XVII  
HEALTH PROGRAMS IN SELECTED HIGH SCHOOLS (a)

School Number	Nurse	Physician	Annual Phys. Exam.	No. of Defects Found	No. of Defects Corrected
30. ....	..	..	x	..	...
39. ....	..	..	x	2	...
42. ....	..	..	x	...	...
81. ....	..	..	..	...	...
97. ....	..	..	..	...	...
98. ....	..	..	..	...	...
167. ....	..	..	..	2	...
188. ....	..	..	x	12	...
192. ....	..	..	..	..	...
356. ....	x	..	x	290	138
448. ....	..	..	x	664	...
468. ....	x	x	..	50	35
610. ....	x	x	x	...	...
665. ....	x	..	x	...	...
993. ....	x	x	..	398	...
1916. ....	x	..	..	50	...
2078. ....	x	x	..	667	237
2812. ....	x	x	..	...	...

(a) Cross (x) indicates presence of item.

TABLE XVIII  
GUIDANCE PROGRAMS IN SELECTED HIGH SCHOOLS

School Number	Items (a)						
	1	2	3	4	5	6	7
30.....	..	..	..	..	X	..	..
39.....	..	.	..	..	..	..	..
42.....	..	..	..	..	..	..	..
81.....	..	..	..	..	X	..	..
97.....	..	..	..	..	X	..	..
98.....	..	..	.	..	..	..	..
167.....	..	..	..	..	..	..	..
188.....	..	..	..	..	X	..	..
192.....	..	..	..	..	X	..	..
356.....	..	..	..	..	X	..	..
448.....	X	X	X	X	X	X	X
468.....	..	X	..	.	X	X	..
610.....	X	X	X	X	X	.	..
665.....	..	..	..	..	X	..	..
993.....	..	..	..	..	X	X	..
1916.....	X	X	X	..	X	..	..
2078.....	..	..	..	.	X	X	..
2812.....	..	..	..	..	X	..	..

(a) Definition of items:

1. Director of guidance
2. Dean of girls
3. Dean of boys
4. Surveys of community resources
5. Group intelligence tests
6. Individual intelligence tests
7. Special aptitude tests

Note: Cross (x) indicates presence of item.

TABLE XIX  
GENERAL INFORMATION CONCERNING COSTS TO PUPILS  
ATTENDING SELECTED HIGH SCHOOLS

School Number	Items (a)				
	1	2	3	4	5
30.....	..	..	.....	\$2.50	\$ 9 75(b)
39.....	.	..	.....	2.00	.....(c)
42.....	..	.	.....	1.50	10.00
81.....	..	..	.....	3.00	10.50
97.....	..	..	.....	3.00	11.00
98.....	..	..	\$ 1 50	1.50	9.00
167.....	..	..	15.00	2 00	10.00
188.....	..	.	.75	2.00	6.50
192.....	..	..	9 00	2.25	7.00
356.....	..	..	..	3 00	5 50(d)
448.....	x	.	.....	2.80	8.50
468.....	..	..	..	3.50	7.00
610.....	x	..	.50	5.00	7.00
665.....	x	..	.50	3 00	9.00
993.....	..	x	1.50	4.00	7 50
1916.....	..	..	.25	3.00	7.00
2078.....	x	..	25	3 00	6.50(d)
2812.....	.	x	.....	3 00	6 50(e)

## (a) Definition of items:

1. Some but not all textbooks furnished free to pupils.
2. All textbooks furnished free to pupils.
3. Highest annual fee charged a pupil for regular class work.
4. Estimated cost to average pupil of participation in extra-curricular activities.
5. Estimated expenditure of each member of the graduating class for participation in commencement activities.

(b) Plus a complete outfit of new clothing.

(c) This high school has no commencement.

(d) Plus such clothing as individual pupils wish to purchase for the occasion.

(e) Plus such clothing as the class decides is necessary.

Note: Cross (x) indicates presence of item.

**TABLE XX**  
**TOTAL INSTRUCTIONAL COST (a) PER PUPIL ENROLLED**  
**IN SELECTED HIGH SCHOOLS**

School Number	Cost Per Pupil
30.....	\$ 96.63
39.....	38.97
42.....	67.50
81.....	42.78
97.....	48.08
98.....	28.93
167.....	30.72
188.....	49.55
192.....	44.22
356.....	40.46
448.....	46.03
468.....	106.58
610.....	48.49
665.....	33.46
993.....	66.75
1916.....	50.84
2078.....	63.82
2812.....	117.00

- (a) Based on salaries of teachers, principals, and percentage of superintendents' salaries allocated to teaching.

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## VITA

### BYRON LEE WESTFALL

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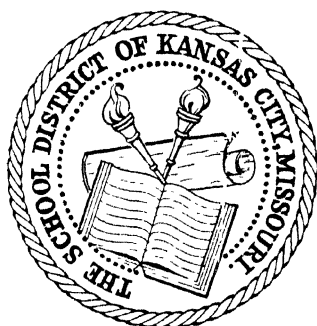
Education: Elementary schools in Missouri and Colorado, 1909-1917; Holly High School, Holly, Colorado, 1918-1919 and 1922-1924; University of Missouri, 1926-1929, B. S. in Education, 1929; University of Missouri, summer sessions from 1930 to 1932 inclusive, A. M., 1932; University of Missouri, summer sessions, 1933 and 1934, the school year of 1934-1935; Washington University (part-time), 1933-1934.

Teaching experience: Assistant to principal (part-time), University High School, Columbia, Missouri, 1926-1929; teacher of science, Paris High School, Paris, Missouri, 1929-1930; teacher of science, Vandalia High School, Vandalia, Missouri, 1930-1931; teacher of science, John M. Vogt High School, Ferguson, Missouri, 1931-1934; graduate assistant in education, University of Missouri, summers of 1932 and 1933; instructor in education, University of Missouri, summer of 1934; associate professor of the teaching of science and supervisor of science in the Training School, Central Missouri State Teachers' College, 1935—.





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